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During the last thirty or forty years, it is true, the economic situation of the Ukraine has changed considerably; three large industries have developed in the country: the sugar industry, the mining and the metal industries. And one is tempted to say that this development was due to Russian protection. But is this quite correct? Undoubtedly the protection had some influence, but not as much as one might suppose. In the first place, one must not forget that in the Ukraine there are natural conditions much more favorable to these industries than in any other part of the Russian Empire. Certainly the sugar, metal and mining interests are among those which depend on the location of their raw materials and can never start in a place where these are lacking. Besides, these industries are infinitely more fostered by transportation advantages than by custom duties. The duties which were imposed on foreign coal did not prevent the importation of English coal into the Baltic provinces nor into Petrograd. On the other hand, even if all custom duties on foreign coal had been suppressed, it would never have penetrated into central Russia and there replaced the fuel of Donetz. As to the sugar, the situation in the Ukraine was perhaps even more favorable. As to metallurgy, it no doubt profited by the protective Russian tax. But there again the role of this tax was not very great. In fact, the products of Ukrainian metallurgy were heavy (rails, beams, tires, wheels, pipes, iron bars, etc.), and their manufacture was only slightly stimulated by the tax because of the great distances over which they had, in any case, to be carried. Protective tariff is much more necessary to those industries which supply finished products of light weight, but of these the Ukraine furnished very few. The textile industry of Moscow and of Poland profited much more by protection, as did many other branches of the industrial activities of central Russia.

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Effect of Russian Imperial Methods in Ukraine

Therefore, by this system, the Ukraine had more loss than profit. She was still a market for Russian and Polish industrial products, for which she paid high prices. But

for her own industry the Russian custom frontier gave her 369
insufficient protection; on the contrary, it rather reserved 241
the Ukrainian market to Moscow and Warsaw.

Consequently the industrial development of the Ukraine 369
was very slow. The agricultural population did not find 241
enough work in the towns, and, as a result, the surplus of 162
agrarian population increased every year. In some parts
of the Ukraine this surplus population was more serious
than in any other part of former Russia. In the central
Ukrainian provinces the agrarian population reached 800 to
1,000 inhabitants per 1,000 hectares of arable land, while
in France and Germany the average was about 500 inhab-
itants. There was nothing left for the Ukrainian popula- [67]
tion but to emigrate and colonize the lands of Siberia and
of Central Asia. There was also a rather considerable
movement of emigration towards America. The most fer-
tile governments of the Ukraine furnished many more
emigrants than the less fertile but more industrial regions
of central Russia.

Emigration as a Possible Solution

As a consolation, it is pointed out that, in case of the 000
reunion of the Ukraine with Russia, the Ukraine will have
in Siberia a field for emigration all ready. But that is very
poor consolation. Can emigration satisfy any country?
Are the Italians proud of sending many emigrants to
America? Did the Germans have cause to feel flattered by
increasing the trans-Atlantic emigration, before they de-
veloped their own industries?

Why, then, should it be the lot of the Ukraine to let
her population emigrate to distant Siberia?

Why can she not develop her economic life in such a
manner that all her people shall have work on their own
soil? The Ukraine ought not to remain an outlet for the
industrial work of the Russians and Poles when her own
people cannot find any work at home.

But one might ask why no complaint has been heard up
to the present, either from the Ukrainians engaged in in-
dustry or from those engaged in agriculture? Why did

The typical Ukrainian house ("khata") is a low house, all 342 on the ground floor; it consists of a living room ("svitlytsja"), a vestibule ("siny") and a bedroom ("komora"). It is built of wood, willows, twigs or reeds, plastered over with clay. In the steppe bricks dried in the sun and made of clay, chaff or chopped straw, are used. Larger stones or short, thick wooden props form the foundation. In mountain areas and in richly wooded Polesia, houses are mostly made of wood. The roofs of Ukrainian houses are usually square and covered with straw, reeds or shingles according to the district.

The Ukrainian farm-house is carefully fenced and surrounded by a garden with fruit and flowers. The house is separate from the farm buildings which are generally round a yard ("obijstja") beside the house; in Northern Ukraine, the latter is smaller, but has a roof of its own. In areas inhabited by Hutsuly, Bojky and partly also by Lemky, house and buildings are under one roof and connected by a roofed passage, ("hrasda").

The wooden churches, a native creation of high artistic 346 value, are a peculiar charm of Ukrainian architecture. We find the oldest forms in Podolia and the country of the Bojky. The wooden churches of the Hutsuly show Byzantine influence, the churches in Carpathian Ukraine, Gothic, and those in the territory of the Lemky, baroque tendencies. The village in 361 Ukraine generally consists of a group of houses with several irregular streets; in the mountains, in areas inhabited by Bojky and Lemky, there are long chain villages, while the Hutsuly prefer the collection of peasant-houses as found in the steppe. In north-west Ukraine there are also chain villages, usually consisting of two streets, which, in Polesya and Volynia, cross each other; in the plains the villages rarely number more than 1000 inhabitants, but in Podolia and Volynia there are also villages with 3000, 4000 and more inhabitants.

Ukrainians are occupied chiefly with agriculture; cattle are 241 ● reared, particularly in the Carpathians and in the foothill areas, partly also in the steppe. Up till recently, agricultural methods were primitive. Later, however, more modern ways of cultivation and a rotation of crops were introduced and the entire industry modernised.

● 241 Nevertheless, old traditions are preserved in connection with agricultural implements and habits. The Ukrainian peasant uses the ancient Slav "ralo" with one plowshare and the old plow reminiscent of Roman models, which is unknown to Russian and White Ruthenian peasants. Up till recently the heavy wooden plow was used in the steppe, drawn by 14 - 16 oxen. As with South and West Slavs, the ox is here the animal usually used for draught, and not the horse, as with the Russians.

The scythe is the most important implement for harvesting. Wheat, rye and barley are cut with the scythe which has developed curious 3-blade forms in Ukraine. The sheaves are first laid together in small stacks, composed of 30 sheaves and called "polukipok". This traditional harvesting operation is known to-day only in Ukraine and White Ruthenia. The latter nation, on the other hand, and the Russians use the drying kiln for grain which has never become common in Ukraine, being used only in Volynia and in the north of the district round Chernyiv.

Threshing is done by flail ("cip"), a characteristic form of which appears also in Mecklenburg. In the south, in addition to threshing by means of a wheel-cart drawn by oxen ("harnanyty"), a roller is also used, while in Bessarabia and the Kuban area, special boards ("mjalky") are found, such as are also used extensively to-day in Greece and Macedonia. Threshing is mostly done in special sheds ("tik") and in winter on ice and in barns ("stodola"), which have a small floor specially for this purpose. The threshing procedure of the Ukrainian differs also from that of the Russian; he does not lay the sheaves out in rows like the latter, but threshes not more than 2 - 3 sheaves at once. Grain is stored in granaries and in the steppe also in pearshaped pits or in straw-containers ("solomjanyk"); in the Carpathians, Polesya and Volynia the custom of storing grain in hollowed trees ("kadovby") is still preserved. In Podolia, Bessarabia and in Southern Ukraine generally maize is gathered and dried in special contraptions, woven like baskets. The shape of the bee-hives in Ukraine is also peculiar. In addition to the forest hives ("kolody") there are also hives lying or standing on a log or piece of wood ("lezen" or "stojan"). The peculiar

Agriculture

1. Agricultural Features and Overpopulation

162 The agricultural overpopulation of Ukraine is a result of its one-sided social and economic structure. In Germany the rural population forms 29 % of the entire population of the country, while the figures for the agrarian countries of Denmark and Hungary are 30 % and 25 % respectively, the corresponding figure for Ukraine being 75 %. The density of the agricultural population in Ukrainian territory amounts to a general average of 54 per ha of agriculturally utilised soil, in the Right Bank Region and in Western Ukraine to 80, and in Galicia to 103. In Denmark, the model agricultural country, the density of the agricultural population is not even 35 and in Bohemia, where agriculture and industry are highly developed, it is only 52. And yields per ha in Ukraine are fairly low: statistics for 1931—35 are as follows (q/ha):

Country	Wheat	Rye	Barley	Oats	Average
Ukraine	8.5	8.8	8.3	9.2	8.7
Roumania	9.6	10.1	10.3	9.7	9.9
Hungary	13.5	11.8	14.1	12.3	12.9
Germany	21.0	17.4	20.1	19.5	19.5

Agricultural overpopulation is particularly noticeable in view of the small share of agricultural land per head of the rural population (not quite 2 ha). Produce is therefore exported at the expense of the standard of living which actually used to be lower in Ukraine than in the European states that imported the produce.

In the years immediately preceding the Second World War yields per ha in Dnipro-Ukraine seemed to have risen

considerably. For 1938 the average figure for grain was given as 10.9 q/ha, for 1939 = 13.9 q/ha, for 1940 = 19.5 q/ha ("Visti" of 11. II. 1941). The average for those three years would be 13 q/ha, higher by 50 % than the average for 1931—1935. As these data were compiled for a meeting of the communist party, a tendency to propaganda must be borne in mind; even in official Soviet statistics, final figures are often more modest than those just quoted. But, in spite of an undisputed increase in yield, the economy of Ukraine must either be strengthened or increased, or both, if it is to be healthy. 241 ● 433

2. Soil and Climate

Ukraine contains 44 % of the Black Earth in Europe (160.5 million ha) and almost 8 % of that in the whole world (900 million ha) and is one of the largest Black Earth areas in existence. In Ukraine itself $\frac{1}{4}$ of the entire soil is Black Earth and only $\frac{1}{4}$ podsol earth, mountain soil and the good renzine soil of Galicia. Podsol earth predominated in Podlakhia, the Kholm district, North Volynia, in Galician Subcarpathia, in the flats round the Syan and the Upper Buh, in Polesya and partly in the district of Chernyhiv. 134

Black Earth is one of the best soils and excellently suited to grain. Its humus content is high, its structure crumbly and it is extremely porous. The humus binds certain quantities of moisture which are distributed fairly evenly. Black Earth dries quickly on the surface but lower down it retains moisture for a fair time, even during drought. It preserves its natural fertility for a long time, does not call for any complicated preparation and is easy to work. It requires no manure which may be positively bad for it and even when exploited, the soil preserves itself, so to speak. It needs a relatively small amount of seed.

It is not necessary to have any specially developed agricultural implements on Black Earth: motor-plows and power-driven agricultural machinery are eminently suitable for the great plains that all demand the same treatment. That is why the tendency to mechanisation and to introduce big-scale operations is particularly marked in the Black Earth areas. 241

3: Mirchuk S-4 (no date) 1949 RDI Ukraine RDI

The 15 % meadows and pastureland is a little lower than 311 the average for most European countries; this figure is higher for Polesya, the Carpathians and the foothills of the Caucasus (25—30 %); in the more intensively managed areas of the Right-Bank Region it sinks to 5 %. Ukraine (like Bohemia and Moravia) has only 7 % of land that cannot be utilised for agriculture or forestry, a proportion that is 16 % for Polesya alone. This figure is considerably higher for most European countries: Germany, Roumania, France and Italy have 12—19 %, USSR 17 %.

20 % of all plowed lands lie fallow, as, with the exception of some areas in the West, the three-crop rotation system is general. Grain takes up 76 % of the arable land, 90 % even in the steppe. Since the first World War this share has declined in favor of technical cultures which have doubled their pre-war area. In 1935 they accounted for 9 %; a further 8 % is used for other vegetation for food (potatoes), 7 % for fodder plants.

Wheat and barley are the two kinds of grain that are most 241 • characteristic for Ukraine, though much rye is also grown. Its share (21 %) of the land laid down in grain and potatoes was in the years 1931—35 between that of wheat (32 %) and that of barley (13 %). Oats followed (10 %), then maize (9 %), millet (6 %) and buckwheat (3 %), potatoes (6 %). Rye is above all used for domestic consumption.

4. Grain: Areas of Production and Varieties

The biggest surpluses in grain are harvested in the old pro-243 vincies of Katerynoslav, Kherson, Tauria and the Kuban area, crops being wheat and barley and others. The proportion of these two varieties in the entire yield of grain decreases as we pass from south-east to north-west. In Western Ukraine, Volynia and the district of Tarnopil are areas of surplus yields while the rest of Galicia has to import grain. Wheat thrives best on the Black Earth of what was once steppe and occupies about $\frac{1}{3}$ of the area laid down in grain and potatoes. Cultivation of wheat increased for a long time in accordance with the growing world consumption, but decreased when facilities for export disappeared and when domestic consumption became more important (see tables 1 and 2).

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distribution. These co-operatives formed the basis of a certain national unity which found expression in the political field. 474

Volhynia, partitioned after the war of 1920 between the Poles and the Soviets, is nearly as old an agricultural country as Galicia. Here the strips of rich black earth alternate with sandy and wooded country. Although density of population is not so great as in Galicia, poverty is perhaps even greater, owing to a lack of that capacity for organization which helps the Galician labourers to survive. The large estates of the Polish nobility have long disappeared; after the last war the Polish Government divided up the land. Numerous strips were allotted to Polish soldiers on the expiration of their service—with the intention of strengthening the Polish ethnic and cultural element in the region. The disappearance of the large estates, as in Transylvania and Roumania, had a deleterious effect on agricultural production and on the proper exploitation of the forests. The majority of the people lead a half-starved existence, and the young men dream of emigration to South America. In 1937, 25 per cent of the population of Polish *Volhynia* had neither bread nor wood. 311 134 241 735

Podolia has been a land of cultivation since the Middle Ages, although the soil was broken up two or three hundred years later than in Galicia and *Volhynia*. Now, as before the period of war and revolution (1914–20), *Podolia* remains in a close economic relationship to the other parts of the Ukraine. The black earth of this favoured province is really fruitful and well watered by numerous small rivers; climatic conditions are better than anywhere throughout the Ukraine—rain is plentiful and regular and the winters are short. It was probably the fields and pastures, the hillocks and woods of *Podolia* which the Polish poet had in mind when he wrote lyrically of 'the birthplace of Ceres and Diana'. Horticulture and apiculture have long flourished there. 311 134

In the past social conditions varied with the political situation according to whether the small landowners (Ukrainian Cossacks) or the Polish landlords were in the ascendant. During the eighteenth century Polish elements had the upper hand and for some time *Podolia* remained the last refuge of the Polish aristocracy. Polish social influences survived the Three Partitions, and it was only after the Polish Insurrection of 1830 that conditions began to change in favour of the Russian majority in the population. 177

Towards the middle of the nineteenth century this rich land with its soft climate had become very densely populated. By the end of the century *Podolia* ranked second in density of population of all the regions of the Russian Empire. The Government of Moscow took 162 311

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the New Russian Governments) there were over 1 million hectares under beetroot. Just before the last war the annual production of beet in the Ukraine reached 150 million quintals: i.e. 18 per cent of world production. The production of Ukrainian beet sugar ranked fourth—after that of America, Germany and France. In 1913 the Ukraine produced 11 million quintals of crystallized sugar. This output, together with that of the Polish factories, covered all the needs of the internal market (which during the preceding twenty-five years had augmented fourfold) and provided substantial surplus for export to the Baltic and the Middle East. 433
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In addition to the beet processing plants, about 60 per cent of the alcohol refineries (corn, potatoes) of the Empire were located in the Ukraine. The production of vegetable oil (particularly from sunflower seed) was also important. [274]

It has been estimated by the Soviet paper *Pravda* that approximately 1 milliard of rubles a year was paid for services on the semi-industrialized estates of landowners throughout Russia: of this sum a considerable proportion was paid for the hire of horse transport (since landowners did not maintain a large number of draught horses but hired from the villages). Of this milliard, about 300,000,000 were paid out in the Ukraine. As the peasant population of the Ukraine numbered about fifteen millions, some 20 rubles a year per head of the population was earned on 'supplementary' work on the large estates. 'Only owing to the sugar and other agricultural industries could the dense population of the Ukraine exist in such comparatively well-to-do circumstances.' [511]

Thus the agricultural economy of Podolia, Volhynia, Kiev, Chernigov and Poltava was based only partly on the production of cereals. With a population which reached nearly twenty millions, only about 2 million hectares were under wheat, while in New Russia, with a population about half that of the Ukrainian Governments, there were 4 million hectares under wheat. The Ukraine exported only small quantities of wheat to Poland and White Russia, which provinces drew the bulk of their supplies from New Russia. The real 'granaries' of Russia which supplied the whole Empire and exported a surplus abroad were the regions of the northern Caucasus and Trans-Volga with western Siberia and New Russia (including the Governments of Kherson and Ekaterinoslav with the northern part of Tauris and the southern part of Kharkov). In those regions the black earth really had a virgin quality during the first half of the nineteenth century; and its richness remains exceptional even now. [241]•
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[134]

As a rule, the climatic conditions in the New Russian Governments

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are much less favourable than in left-bank and especially right-bank Ukraine. They become worse going from west to east: the region of Odessa has the most equable climate and the shores of the Azov Sea the worst of all. In the east rainfall is insufficient, attaining in good years 50-40 cm. and in bad years not exceeding 20 cm., while in central and southern Ukraine it is 80 cm. and 40 cm. respectively. There is, furthermore, in the New Russian Governments an unbalanced distribution of rainfall: the country suffers from a shortage of rain in the spring when it is most needed, and from violent downpours in the summer. The climate of New Russia clearly inclines to aridity. In the old days the Black Sea steppes were covered for a short time in spring by a luxurious growth of high grass and wild flowers which disappeared in the following months. The steppe dries up completely during a period when the temperature reaches from 30° to 40° Centigrade and even the rain-storms of July and August cannot give new life to the parched ground. Under such conditions field labour calls for special methods. The soil has to be ploughed deep, and great layers of earth have to be lifted—'the black fallow' which has not been dried out. The weak peasants' horses of the northern Ukraine are useless for such work. Ploughing in New Russia requires either two pairs of strong oxen or, better, mechanical traction. Before the last war, only wealthy landowners or agricultural colonies working on a co-operative basis could afford the latter method, which was introduced into New Russia as early as the end of the nineteenth century.

By force of circumstances farming in New Russia acquired quite a different character from that which had evolved in the historic countryside of old Ukraine: it even created a different landscape. 'Fruit-trees, especially cherry-trees, lend a charm to the Ukrainian landscape in the neighbourhood of Kiev and Poltava which recalls the rural landscapes of France. In New Russia, on the contrary, the lack of trees, the dryness of the climate, clouds of dust driven by the wind, lonely hamlets—all this goes to create an austere landscape which recalls rather the high plains of northern Castile. Only the endless cornfields with their undulating golden sea of wheat lend a lyric note to these flat unwooded spaces. Villages there are not picturesque and in agricultural colonies practical considerations take precedence over the desire to beautify the environment. The houses, however, are more modern, more spacious and better built. Thatched roofs have given place to tiles or sheet-iron' (Brégy and Obolensky).

Wheat forms the basis of the agricultural wealth of New Russia. Before the last war, wheat covered 25 per cent of all the farmed

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land in the Ukraine and New Russia: of 25 million hectares of 241
 arable, 6½ million were under wheat, and of these 4½ million were
 in New Russia. Ukrainian and New Russian production attained 433
 90 million quintals a year, of which 70 million came from the New 241
 Russian Governments. (In addition, the Ukraine produced for
 internal consumption about 30 million quintals of rye—in the
 northern districts—nearly as much barley, and about 20 million
 quintals of oats.) The wheat crop of the Ukraine and New Russia
 represented 8 per cent of the total world, and 18 per cent of Euro-
 pean, production. With an average production of 70 million
 quintals a year, the New Russian Governments could throw an
 important surplus on to the world market. Before the Revolution
 about 76 per cent of the crop was retained in the villages for food,
 storage and seed (on the larger mechanized estates and co-operative
 colonies the average was round 70 per cent). The balance, about
 20 million quintals, went on the market: of it about one-quarter
 was absorbed by the towns and industrial centres of New Russia.
 Under these conditions the three New Russian Governments had [439]
 available for export abroad 15 million quintals of wheat, i.e. about
 1½ million tons. The crop of New Russia and the northern Caucasus
 was exported to the Ottoman Empire, Greece and particularly to
 Italy, where the 'hard' types of grain were appreciated as an in-
 gredient of macaroni and other *paste*. Even after the last war and all
 the ruin of agriculture resulting from the Revolution, the Soviet
 Press, in 1929, could boast that about 1½ million tons of wheat had
 been exported through the New Russian and North Caucasian
 ports (Professor Brutskus holds that this export—the relation of
 which to total production greatly exceeded pre-War proportions—
 was one of the factors in preparing the way for the terrible famine
 of 1932).

'From remote times the Ukraine and New Russia were famous 231
 for their draught oxen. Further, many landowners possessed herds
 of foreign cattle, principally Swiss breeds. All the German colonies
 bred good milkers' (Shcherbatov). In 1914 there were estimated
 to be over 9 million head of cattle, 6 million sheep (numbers of
 them of valuable breed) and 5 to 6 million pigs in the Ukrainian and
 New Russian Governments (the pigs predominated in northern and
 western Ukraine and sheep in the New Russian steppes). South
 Russia, an ideal horseman's country, possessed also a vast number
 of horses. Before the last war there were reckoned to be 5½ million
 horses in the Ukraine and New Russia (1 horse to every 5-6 people,
 and one-sixth of all the horses in the Empire). Government studs,
 and those of private landowners and of certain *zemstva*, maintained

474 U.S.S.R., and there is no doubt that one of the results will be a further
166 weakening of Ukrainian elements where the Government considers them to
be still too strong

Secondary Branches of Ukrainian Agriculture

● 241 In addition to wheat, rye, barley, oat and maize crops are important. Millet is also grown and forms the base of the broth (*psheno*) which is a favourite dish in the South of Russia (in the North this broth or porridge is made from buck-wheat).

Clover and lucerne are comparatively little cultivated, and almost exclusively in right-bank Ukraine and Galicia.

About a million hectares are under potatoes in right-bank Ukraine; the bulk of the crop goes to the alcohol distilleries.

Sunflower-seed is important in the production of oil; hemp and small quantities of linseed and mustard-seed are produced for the same purpose.

The cultivation of hops was always traditional in Volhynia; in pre-Revolutionary days half of the hop production of the Empire came from Volhynia and right-bank Ukraine. In late years production has greatly declined.

Tobacco, the cultivation of which was introduced by Greek immigrants in the eighteenth century, is a speciality of the districts of Nezhin and Romen. The quality is not good and the cultivation of tobacco has no future in the Ukraine.

Particularly in Podolia and the region of Uman, *kolkhozniki* take great interest in horticulture; about 200,000 hectares are under orchards. On many *Kolkhozy* the *kolkhozniki* occupy themselves on the private cultivation of tomatoes, and the Government has set up canning plants in order to encourage this branch of production.

The vine grows well on the banks of the Dniepr and the southern Bug, in the neighbourhood of Berdyansk and Odessa, and along the Dniestr. But wine production has not been developed on the scale which it has attained in Bessarabia and the Crimea.

The Soviet Government favours agricultural experiments, and some *Kolkhozy* in the South have tried to cultivate rice—so far with little success.

An experiment on a large scale was made in the cultivation of cotton. 190,000 hectares between the mouth of the Dniepr and Perekop were reserved, but it is not likely that cotton cultivation in the Ukraine will prove the success which it has in the more suitable climates of Azerbaijan and Turkestan.

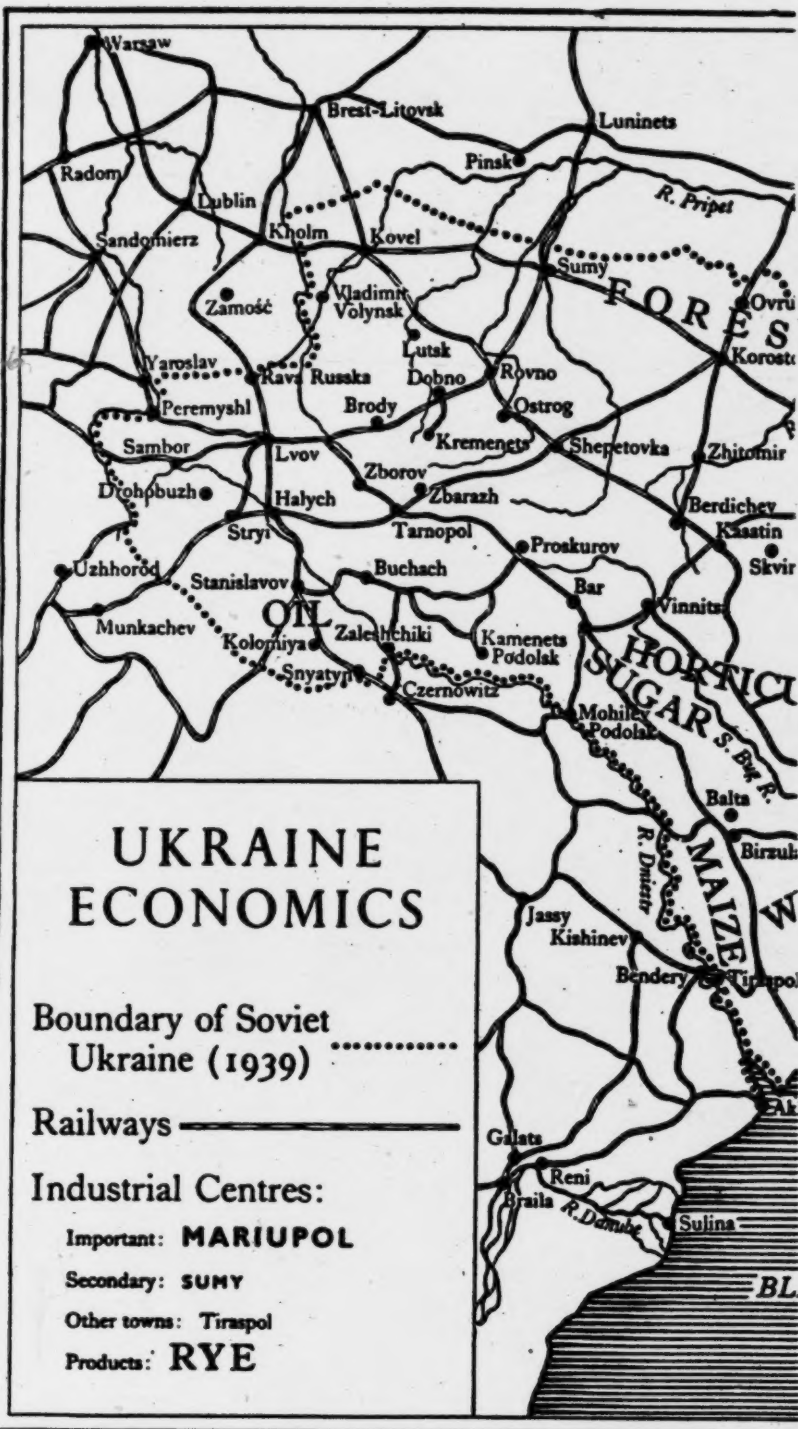
Secondary Mineral Resources in the Ukraine

135 Reserves of different qualities of lignite are distributed over many parts of the Ukraine. In view of the abundance of other resources of calorific power, exploitation has not been greatly developed, but output of lignite in the region of Elizavetgrad attains 300,000 tons a year.

A million tons of peat is cut annually in Ukraine—about 10 per cent of the output of U.S.S.R.

Bauxites in the Dniepr region are utilized for the Aluminium Works near Dnieprostroy.

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4: Allen H-4 (no date) 1941 RDI Ukraine RDI

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Ukraine Under the Soviets

185 The peasants also revived and breathed new life into the co-
474 operatives which had been broken up during the period of Militant
● 291 Communism. In 1923 they established another cooperative organ-
ization, the Selo-Tekhnika (Village Machines) which purchased
more expensive agricultural machinery and rented it out to the
peasants for the appropriate agricultural work. These points be-
came the centre of mechanization and were in effect the first
[453] tractor stations. In 1924 they established the First Agricultural
Bank, a sort of private institution which at one time had more
loans outstanding than had the Ukrainian State Bank which was,
of course, closely supervised by Moscow.

185 All these efforts met with marked success and agriculture
369 speedily began to revive. The peasants became more prosperous
and their holdings of livestock rapidly increased, although they did
not reach the pre-war level. This, in its turn, created a new demand
for manufactured products and restored the factories to operation,
and with them the conditions in the cities began to improve.

185 Similar concessions were made to industry, but with one im-
471 portant difference. The larger and more important industrial
[475] plants were not turned back to their former owners who were, as
before, allowed no voice or influence in their direction. They were
taken from the workers who had seized and abused them during
the period of Militant Communism and placed under the super-
vision of government trusts. These were either regional in character
or confined to a single branch of industry. In either case, they
were under the control of a more or less trusted group of men
among whom Communists were in the leading positions, but while
they received certain credits from the state, they were more or
less autonomous and they were allowed to go through regular
commercial transactions and encouraged to show profits in their
annual reports. There was thus again a source of encouragement
both for the directors and the workers, and slowly but surely the
level of industry began to rise.

The smaller plants were very often leased to individuals who
were allowed to employ hired labor and the hope was given to
these that their taxes would be at such a level that they, too, could
★ [NEP attempts to restore peasant prosperity -- Analyst]

Ukraine Under the Soviets

631 into three classes: Union, Joint and Republic. Thus, those of
 642 Foreign Affairs, Armed Forces, Foreign Trade, Communications,
 645 Water Transport, Posts and Telegraphs, Heavy Industry, Light
 Industry, Supply and Timber had full control over the correspond-
 ing sections in the federal republics. Those of Internal Trade,
 Labor, Finance and Workers' and Peasants' Inspection were nomin-
 ally joint commissariats but, in case of a dispute between the Union
 and the Republic commissariats, the rights of the former were
 supreme. The remaining commissariats, Interior, Justice, Educa-
 tion, Health, Agriculture, and Social Welfare were still left under
 the Executive Committee of the Republic Supreme Soviet. It was
 thus very evident that, except in a few fields, the powers of the
 Ukrainian Soviet Republic to decide its own destiny were practically
 non-existent.

It goes quite without saying that it was these local commis-
 sariats which attracted the Communists of Ukrainian origin, whether
 or not they belonged to the Ukapisty or had joined the Ukrainian
 Section of the Russian Communist Party as former members of the
 Borotbisty. This was a very important development in the next
 decade in Ukrainian history and it was due to the relative freedom
 of the Commissariat of Education that the Ukrainian cultural
 renaissance took the form which it did.

655 At the same time, despite all the verbiage and the apparent
 327 exceptions, it was abundantly clear from the very beginning that
 185 the economic system of the Ukrainian Soviet Republic was to be
 bound hand and foot to the Moscow regime and that its financial
 and industrial potentialities would be treated as Moscow wished.

It was relatively simple to deal with industry. The develop-
 ment of the coal and iron resources of Ukraine were simply trans-
 ferred to Moscow control and it was practically impossible for the
 Ukrainians to express any opinion as to the form which that develop-
 ment would take. The Russian directors of the trusts could make
 such contracts as they desired and carry them out without regard
 to the wishes of the local population or the workmen.

432 Agriculture was a little more difficult. The decree of 1921,
 241 which had started the New Economic Policy, provided for the
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The New Economic Policy

payment of a specific amount of tax in kind and left to the peasant the rest of his crop. In an endeavor to get this grain into Russia, the government offered to buy it but it did not have the funds or the inclination to pay for it at the market price. The financial reforms connected with the introduction of the chervonets could, to a certain degree, make it expedient for the peasant to sell to the government for cash, and as time went on the peasant gained the power of selling his crop for cash but the Moscow control of transportation and the prohibition of large scale trading left him helpless and he saw himself forced to dispose of it locally or to the government. Then the government made a fixed price which was far below that of the free market, and was often scarcely a third of the amount that the peasant could have secured. This sale of large quantities of agricultural products at a fixed price gradually became the rule and was one of the signs that the period of toleration for private income was coming to an end. [435]

In 1925, the government began to clamp down on the small traders, the Nepmen, who had profited by the opportunities which they had had. Again it had a large choice of measures. Thus, depending on the situation, it could invoke laws against the hiring of labor; it could order the state agencies to refuse to buy from or sell to an obnoxious individual and thus isolate him; it could suspend his ration cards and perquisites, take away his right of voting and thus make him a pariah in the community; it could levy prohibitive taxes which would put him out of business and confiscate his property; or it could find some violation of some other law or regulation and imprison or exile him. 656 661

The degree of pressure which was put upon the peasants and the workers varied from year to year. Each year Ukraine was compelled to export more to Russia without regard to the needs of the local population. Thus, the amount of grain rose from 1,050,000 tons in 1924-5 to 3,165,000 tons in 1926-7, when there was a bumper crop, but in 1927-8, when the harvest partially failed and there were signs of need in the country, the amount collected and exported rose to 4,353,000 tons. At the same time, the continually increasing demands aroused again a spirit of oppo- 439 241

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439 sition and of indifference among the peasantry and a resentment
● 241 against the growing exactions of the Soviet regime in Moscow.

oo o Still these were years of relative peace. With the introduction of the New Economic Policy, the government became more tolerant of differences of opinion and the OGPU (the Organization of the State Political Administration, the new name for the old Cheka) was relatively inactive. There were few political arrests, imprisonments, executions and deportations and the bulk of the population began to breathe more easily. There were men, however, who saw the straws in the wind. For example in 1924, Mikhnovsky, who had been one of the early Ukrainian nationalists, committed suicide and so did Syrotenko, a prominent Social Revolutionist, but these were in a way exceptional cases.

It is far more likely that this lull was part of the Moscow policy of preparing to eliminate in one swoop all persons who might prove to be dangerous, but it was also affected by the confusion and the intrigues that were going on in Moscow. With the death of Lenin, there was no clear successor to his post and prestige. There were many claimants, notably Stalin and Trotsky. When Lenin died, the power passed into the hands of a small group of leaders with Stalin, the Secretary of the Communist Party, and Trotsky as Commissar for War as the main contenders for the supreme power. The struggle between these two men lasted for several years, with the star of Stalin rising over that of Trotsky who favored a far more rigorous policy toward both the Nepmen and traders in the cities and the kulaks or kurkuls (the richer peasants) who had profited materially by the opportunities for private trade and production. It was not until that conflict was over that any one dared to risk the internal upheaval that might come with a change from the avowed outlines of the New Economic Policy and a reintroduction of more rigorous socialist or communist practice.

CHAPTER TEN

The Famine

In 1921, the great famine which had swept over Ukraine 731 had been the result of a failure of the crops, a prolonged drought and the excesses of Militant Communism which had demoralized the country. The Soviets, more or less unwillingly, allowed the despatch of foreign assistance and this saved the lives of millions. There was to be no interference in the punishment of the obstinate peasants this time.

In the fall of 1929, just as compulsory collectivization was being 341● introduced, the government in Moscow made an important change 645 in the agricultural set-up, for it transferred the Commissariat of 631 Agriculture to the central group by establishing an All-Union Commissariat which was to be in control of all agriculture in the Soviet Union. This meant that in Ukraine all of the work which had been previously done by the local authorities was now transferred to Moscow. The republic commissariats ceased to have the power to pursue individual plans for improving the conditions of the soil, for varying the crops as their own advisers decided or as the population felt it necessary. Everything was to be done from the centre and the Ukrainian Soviet Government was compelled to hand over all of its research stations and other institutions to Muscovite control. This put a stop to the intensive development of Ukrainian agriculture which had been fostered by the Ukrainian land code and introduced the new system in which the peasants were in the same position as the workers in the factories.

At the same time, the central regime ceased to make public the 433 actual figures of production on the ground that they might betray to outside nations important facts as to the Soviet development. From this time on estimates and achievements were given only in

¹/_A [1929 - All-Union Commissariat of Agriculture was established 93--Amlyst]

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433 terms of percentages in reference to a prior date. Still the already published data were so scanty and incomplete that it became increasingly more and more difficult to secure an actual picture of the progress in the Union as a whole and still more so in any of the separate Soviet Republics, for the central regime rarely broke down what little information it gave out among its constituent parts.

65/ It was not long before another change was made in the methods
 ● 241 of collecting the products from the collective farms. Under the new
 66/ system, the farms did not contribute according to their crop but according to the amount of land which they proposed to sow. This amount was due to the government, even in those cases where there was a complete failure of the harvest not under the control of the workers. In other words, if a crop failed because of bad weather conditions, the peasants were compelled to hand over just as much produce as if they had had a bumper crop.

It can be easily seen that such a measure was merely another device for weakening the economic position of the village and the independence of the collective farm. At the same time the establishment of official tractor stations in place of the old locally controlled centres which sent crews and machines into the countryside gave the government another weapon for the exertion of pressure upon the peasants and even the Communists who were in charge of the farms and these crews likewise were paid not on the basis of their work but of the theoretical area which was to be sown. Later this was again changed to the total area of the farm whether it was suitable for any special kind of agriculture or not.

These measures only increased the discontent among the peasants who once again began to limit their work to the minimum necessary to maintain themselves on a steadily dropping scale of living. To counter-balance this the Council of Commissars in Moscow passed a decree in February, 1930 allowing the local authorities who were, of course, handpicked by Moscow to resort to extreme measures against the kurkuls, to confiscate their property and then to dispose of them by sending them and their families to concentration camps, to special settlements in the far north or eastern Asia or merely by expelling them from their home district.

4 [after establishing All-Union Commissariat of Agriculture, 1929]

The Famine

These measures were so vigorously applied that it has been estimated 65/
that by the end of 1932, some 2,400,000 persons had been removed 241 ●
from Ukraine to parts unknown. These were naturally the more 66/
prosperous, the more progressive and energetic persons who had
profited by the New Economic Policy and had accumulated some
capital.

The forcing of the peasants into the collective farms¹ and the 185
prohibition of almost all possibilities for the securing of raw ma- 433
terials had a further effect. Under the older system, the Ukrainian 511
peasants had time, during the winter especially, to work at home
and to supply themselves most of their need for manufactured
articles. They were able to work in leather and in cloth and wood.
This was now rendered impossible, for the individual plots were
too small to furnish the necessary raw materials and the peasants
were forced, if they would satisfy their most immediate needs, to
rely upon the goods turned out by the state factories. These goods
were always inferior in quality and short in quantity, for the whole
point of the Five Year Plan was to develop heavy industry as
rapidly as possible and the government took no interest in seeing
that the villages were supplied with consumers' goods. It con-
centrated its attention on those branches which could be of use in
military preparations. Even when petitions were made by the
Soviets in Odesa and Kharkiv for permission to establish textile
factories, they were peremptorily told that the plan provided for
the establishment of such plants only in selected parts of the RSFSR.
Thus to the local shortage was added the costs of distant transpor-
tation, which made the price prohibitive even for the goods that
were received.

In 1931 almost the entire grain reserves were removed from 65/
Ukraine and the peasants had nothing to carry over, and when in 685
1932 there came a drought in the Ukrainian Soviet Republic, the 241
peasants had no supplies. 511

This did not bother the authorities. During 1931 and 1932
they collected from the peasants all that they could. The next step
was to tighten the laws.

On August 6, 1932 the TsK VKP/b and the Soviet of Com-

[1929-1930 - 1st Five Year Plan -- Analyst]

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65/ missars issued a decree for the "protection of socialist property."
685 Under this law the stealing of a single ear of grain from a kolhosp
241 granary could be punished by confinement for ten years in a con-
511 centration camp. It was so interpreted that if a peasant picked
up a single stalk from the field after the harvest, he was liable for
the same punishment. In other words, the peasant could only
secure his grain legally from and through the administration of the
kolhosp.

With this law on the books, the Ukrainian collective farms could be punished either for failing to protect "socialist property" or they could be attacked for failing to present to the government crops and grain in an amount equal to that foreseen by the plan. This was the easier because there were few of the kolhosps that had been able to sow the area required of them. Lack of intelligent and competent leadership on the farms and the exigencies of the weather made it almost inevitable that there would be deficiencies, especially since the schedules were made up in Moscow and took no account of the local conditions.

As the grain deliveries lagged, the demands increased and on January 24, 1933, the Central Committee of the VKP/b issued a new resolution that "it was regarded as proved that the party organization of Ukraine had not carried out the tasks assigned to it in organizing grain deliveries and executing the grain plan."

To remedy this, the central authorities ordered the formation of political detachments in the machine tractor stations, "the chief basic tasks of which were the insuring of the unconditional and immediate execution by the kolhosps and their members of all their obligations to the state and especially the decisive struggle with the stealing of kolhosp property, the struggle with the manifestations of sabotage of the income of the party and the government in the sharing of the grain supplies and the meat products of the kolhosps."

The leaders of these detachments were given the obligation "to secure the constant lawful and accurate fulfilment of the laws of the Soviet government by administrative and criminal measures against the organizers of the stealing of Soviet property and the

The Famine

sabotage of the income of the party and the government in the branch of village agriculture."

The machine tractor stations were staffed by men largely alien to the Ukrainian countryside. The more fanatical Communists were placed in these political detachments and were, in effect, told to supplement or replace the local administration in the exercise of pressure and terror upon both the heads and the members of the kolhosps. To aid them in their work Moscow sent to Ukraine a Russian Pavel Postyshev as a special plenipotentiary of the Central Committee with 7,000 party workers from the Russian Republic.

The work of these special "commissions" and "brigades" was marked by the utmost severity. They entered the villages, and made the most thorough searches of the houses and barns of every peasant. They dug up the earth, broke into the walls of buildings and the stoves in which the peasants tried to hide their last handfuls of food. They even in places took specimens of the fecal matter from the toilets in the effort to learn in that way by analysis whether the peasants had stolen government property and were eating grain. Wherever they found any, the peasants were severely punished, while the detachments carried off not only grain but everything edible.

The same reports came from every corner of Ukraine. "They requisitioned everything that could be eaten" was the report from the village of Zorich in the district of Poltava. In one village in the district of Odesa, "they collected all the grain, potatoes, beets to the last kilogram" and in other places they even took half-baked loaves of bread from the stove. In at least one of these commissions, Molotov, then head of the Council of Ministers, took a personal part.

The natural result¹ was a famine of unprecedented severity. The villages had been hungry in the autumn. After these searches commenced, they literally starved. An Englishman, M. Magridge, wrote in the *Fortnightly Review* for May, 1933: "During a recent visit to Ukraine, I have seen a little of the war which the Soviet government is carrying on against the peasants. The fields were [result of excessive grain requisitions in 1933 -- Analyst]

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The Thirties

country for less populated districts in the east, while, on the slightest 166
suspensions, whole families were deported, separated and exiled, and 626
their places taken by people from other Soviet republics who were
brought in to destroy the racial unity that formerly existed in the
villages.

To appreciate the difficulties of the peasants on the collective 241 ●
farms, we must remember that the involved bureaucratic system 651
had ample opportunities for extorting the grain for little or no 474
payment. Thus the Motor Transport Stations which controlled 465
all the machinery were supported by payments from the collective
farms of grain and other products in kind and this usually ap-
proached 21.5% of the total yield, while the Stations took over
23% of the crop for the government. Another 15% was retained
by the kolhosp for sowing and for various insurance funds that
were prescribed by law and another 18% was kept for fodder and
for the compensation of the full-time administrators. Thus, there
was barely a quarter of the produce left to be distributed among the
working population and this was the variable quantity since all
of the payments and collections were based not on the actual har-
vest but on the harvest as planned by the central authorities. Thus,
in the case of a bad harvest, the share allotted for distribution was
the part that was cut and the government, so far as possible was
provided with its expected supply.

This amount was divided among the individuals and families
on the basis of the labor days which they had worked. In the
beginning a labor day meant labor for a day, no matter how many
hours of labor were required, but even before World War II, this
simple definition was replaced by a specification that it covered a
definite amount of work and it might very easily happen that a
slow or poor workman would have to work more than one day to
make a labor day. Thus, there was the possibility of still further
exploitation of the workmen, who could not know accurately until
the end of the year on what they could count.

There was also distributed, likewise in proportion to labor days,
a certain sum of money which the kolhosp received from the
government in return for the sale of grain over the amount col-

[after 1933 famine - - Analyst]

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lectured for the tax in kind. This was a negligible sum and the average member rarely received more than one ruble per labor day. This sum was, of course, insufficient to provide for the goods which the family needed to purchase, and since their share of the grain was rarely sufficient to feed them, their situation became hopeless, while of other products the individual received about one litre of oil, fifty kilograms of potatoes, thirty-five kilograms of fruit, and five-tenths kilograms of meat and fat.

[435]
The real significance of these figures is shown in the prices that were charged in the state stores. There a kilogram of bread cost ninety kopecks, ten eggs brought eight rubles, a kilogram of beef twenty-four rubles, and a pair of boots four hundred and fifty rubles, while a farmer's suit of clothes cost five hundred rubles.

[422]
It made the peasant really dependent upon his individual plot of land if he was to secure any necessities. This was far too small and its use was bound with many restrictions. Thus, no family was allowed to hold more than one cow and two calves, one sow, up to ten goats, an undefined number of chickens and up to twenty beehives. In the beginning it was possible for the peasant to secure a certain amount of food for these animals from the common store. He was allowed to retain the manure and it was thus possible for him to improve his own individual plot and thus to secure larger returns. It was a liberal application of such principles that had rendered possible the general improvement which was noticeable during the years 1934-6, when the government was endeavoring to make the system of collective farms workable.

It can be easily seen that the system of allowing individual incomes was based on a principle opposite that of the New Economic Policy, for it would require scarcely a legislative enactment to reduce these amounts while the New Economic Policy presented a norm of profit to the workers. Yet with each year, once the government was convinced of its success, it found it possible in various ways to tap this new source of income for its own purposes.

The favorite method was by taxation. Thus, by 1939 if we should assume that the average family received in cash four hun-

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[Ukraine - after 1933 famine -- Analyst]

The Thirties

dred and eighty karbovantsy, they would be required to pay 241 ●
 twenty-two and a half karb. in taxes, twenty in rent, fifty as a 651
 special tax and they would be required to volunteer to take at 474
 least two hundred in government bonds. 465

Even this did not cover the total payments to the government. With its usual love of double-talk and subterfuge, the government, which controlled every branch of human activity in the USSR, talked of the establishment of socialism and levied indirect taxes on all transactions so that the actual cost to the villagers of any manufactured article was about three times what it cost the government as producer. The whole subject was carefully veiled as a state secret to protect the Soviet Union against capitalist intrigues but the unfortunate population were the unwilling contributors to this new order of life.

Under such conditions it is extremely difficult to pierce the veil [652] of percentages as to cost and production and give a reliable estimate as to the amount of money received for the government or the relationship between the sums spent in maintaining the operation of the Moscow-controlled factories in Ukraine and the amount spent upon the needs of the population either individually, as families or as citizens of the UkSSR or of the UkSSR as a governmental unity within the Soviet sphere. From those figures which the Soviet has let out, it is possible to see that the yearly budget of the Ukrainian Soviet Republic has run from 2½-5% of the budget of the USSR while the population has been at least 18% of the total population.

With the villages compelled to yield the last pound of grain, 369 etc., that could be extracted by force, and receiving in return 511 almost no manufactured goods, the position of the city workmen and the intelligentsia was little better. The wages of the workmen were always insufficient, the housing conditions were hardly endurable, and the only point of betterment was that the larger places and some of the plants especially favored by the regime received more manufactured goods of a poor quality and at a high price which the fortunate people might be able to secure.

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727 Inasmuch as all the land was organized in collective farms and the
 661 title to these rested in the Soviet government, they as conquerors
 • [241] merely took over the land of their defeated rivals. They continued
 the same kind of collectivized agriculture, since it brought them
 the greatest advantages and they had no intention of doing any-
 thing for the Ukrainian population. Koch made it clear that the
 Ukrainians had no rights that the Germans were bound to respect.
 Their property was not theirs but it was reserved for Germans
 and once the system was in the saddle, as shown by Koch's Twelve
 Commandments for the regulation of the relations of the two
 peoples, he did everything to destroy completely the Ukrainian
 intellectual life.

[538] By the winter of 1941-2, the Germans in Kiev were executing
 [466] Ukrainian writers as O. Teliha and Dr. Oleh Kandyba-Olzhych,
 who were accused of plotting against the new masters. Soon there
 began extensive deportations of Ukrainians to Germany for slave
 labor and the number of victims from the ranks of the cooperatives
 rapidly grew.

668 These German actions naturally roused the Ukrainians to a
 more vigorous opposition and resulted in the formation of numerous
 armed bands which, from secure hiding places in the forests and
 swamps, raided German convoys and at times extended their open
 control over large areas of the country. Among the first of these
 bands to appear was that of the Polyssian Sich under the command
 of Taras Bulba-Borovets which operated in Polissya and Volynia.
 Other significant and important movements were started by the
 followers of Bandera (the so-called Banderivtsy) and of Melnyk.
 Yet these groups were not alone for almost spontaneously there
 sprang up many other local units, all interested in the same goal of
 Ukrainian independence. Some of these units were organized
 primarily to fight against Soviet irregulars. Others had seen from
 the beginning their most dangerous foe as the Germans but what-
 ever their origin, the overbearing brutality of the Germans swung
 these groups to a determined warfare against them.

668 This process continued during most of 1942 with the Ukrainian
 725 forces taking over more and more control from the Germans,

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727 their posts and the vast majority of those who were Communists
 316 received more or less sinecures above ground. Their places were
 [466] taken by forcing the Ukrainian peasants, including a large per-
 centage of young girls, to work in the pits with the minimum of
 safeguards. Little money was appropriated for the restoration of
 the damaged housing, for as the writer Korniychuk declared in
 one of his works, "Ukraine was so thankful for the success of Stalin
 that they did not care how they lived, for if he had perished, life
 would not be worth living under any circumstances."

727 With this attitude prominently emphasized by the leading
 propagandists, it is easy to see that the resources and energies of
 the population were directed by force rather toward those items
 that would advance the importance and the convenience of Moscow,
 than those that would be of advantage to the local population.

[496] The one exception was the necessity for rebuilding immediately
 and strengthening the railroad communications between the Donbas,
 Moscow, Leningrad and the Black Sea ports—in other words, the
 extreme eastern part of the Ukraine which was slated for a special
 development with roads and railroads linking the country up with
 the Russian centres rather than with the other Ukrainian centres
 to the west for these were regarded as exposed centres in case of a
 new outbreak of hostilities and were to be neglected until they were
 masked by the extension of Soviet power over the satellite countries.

474 The collectivized agriculture was in little better shape. In
 341 that part of the Ukraine which had been under Soviet control
 before 1939, the authorities revived the collective farms but they
 had been so badly ruined that at first the authorities were often
 willing to be more considerate of the members. Immediately after
 the war they allowed them to group themselves into links or
 permanent sections of some eight to ten people who would thus
 come to feel themselves a distinct unit in the collective farm. It
 did not take long for the more rigid Communists to decide that
 this sense of permanence was in a way a defiance of the principles
 of collectivization, for very often members of the same household,
 if it were at all numerous, would group themselves into a link.
 In such cases the link became more prosperous, for it was in a way

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a revival of that form of family agriculture which had long been popular in the Ukraine before the collectivization. Furthermore, it was soon suspected that the links varied in their delivery of supplies to the government, sometimes in inverse proportion to their own readiness to work. The peasants likewise as in the early days of the NEP devoted more attention to their own private plots of land, a phenomenon that had been noticed even before World War II.

The Soviet authorities had several answers to such developments. On the one hand, they finally forbade the operation of the permanent links which had developed to the point where they threatened the objective of collectivization, the turning of the peasant farmer into a paid proletarian worker in agriculture. On the other hand they reduced the size again of the individual plot of land and they forced the peasants to give up animal raising on their plots by charging them for even the straw from the collective farms and the wild fodder that grew in abandoned places. Then again, they levied a tax on the products of these plots and this, plus the reduction of the allotment, rendered it impossible for the peasant to improve his lot except through increased work on the collective farm. In the meanwhile the steady raising of the quota of work required for one labor day made it impossible for the average peasant, unless he was a Stakhanovist (i.e. a person who cooperated with the central regime and thereby received favorable assignments) to complete one labor day within one calendar day, no matter how long hours he worked. This had been a favorite device of the Russian landlords as we learn from Radishchev's *Journey from Petersburg to Moscow*, a famous Russian radical work of the end of the eighteenth century but a modern version of it was adapted by the Russian Communist leaders and used effectively.

Even these measures were not the desirable solution. This was first proposed by Khrushchov in 1947, and while it was at first looked upon with some disfavor, it was finally deemed suitable by the slave-drivers of the Kremlin, and Khrushchov, after a period of mild disfavor, was promoted to the Politburo, and another Russian, Melnikov, placed in charge of Ukraine. This was the

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474 creation of great "agro-cities" or "agro-settlements" which would
 • 241 unite several collective farms in one great centre which could be
 665 more easily controlled by the Communist Party with a smaller
 number of qualified party members in charge. By the end of 1950
 the number of kolhosps (collective farms) had been reduced from
 33,653, as at the end of the war, to 14,443. The number of house-
 holds in one had grown from 163 households to 277. At the same
 time the number of collective farms in which there were definite
 party leaders had increased from 42% to 78%. This does not
 imply a growth in Communist membership, for the number of
 Communist authorities might, under the new ratio, be reduced by
 almost 3,000 in personnel. This would be hardly likely but it
 explains at a glance the increased control that the Communists
 could exert over the larger groups. It also made it easier by
 destroying the separated villages to prevent as effective help being
 given to the U. P. A. and the other anti-Communist movements
 which lingered on, as the peasants saw that the new era was to be
 not one of peace but of increased hardships. At the same time, the
 423 peasant was made more helpless for his holdings in the neighbor-
 241 hood of his home were reduced to 0.15 hectare or approximately
 a third of an acre.

This area is roughly equivalent to the average American subur-
 ban lot of 150 x 100 feet and on this the average peasant family
 was supposed, no matter how many members it contained, to raise
 all the vegetables, eggs and milk which the family required for the
 year and also any other plant or animal requirement which was
 needed as a cash crop. Even this was now burdened with taxes and
 the peasant was forbidden to secure anything from the collective
 farm to assist in his economy, outside of what he secured in his
 pay for a steadily diminishing number of labor days and the accom-
 panying cash and kind receipts which were apportioned to him
 for his work.

474 Estimates based on figures from some collective farms show
 434 that the average family receives for its year's work, if three or four
 241 members work, something in the neighborhood of three hundred
 pounds of grain, four hundred pounds of potatoes and about one

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thousand karbovantsy in money. When we remember that, as a result of the Soviet tax system, a pair of shoes cost five hundred karbovantsy and a suit of average quality a little more than one thousand karbovantsy, we can see how dependent the average peasant is upon his small plot on which his egg tax is, whether he raises eggs or not, two hundred per year. In addition, from his cash resources he must buy the grain for his hens or raise it on his own plot.

It is small wonder that the foreign visitor is not welcomed on these collective farms except in a few places which are kept for show. In all of them the Communist heads receive very satisfactory living conditions with opportunities to purchase supplies at very moderate prices in shops devised for Communist administrators, and it is these administrators, and the Communists of the Motor Tractor Stations and the MVD who receive almost the entire income that is allotted to the collective farm.

The position of the city laborer is little better, although he receives in connection with his plant the opportunity of securing whatever the factory heads feel like giving him for food in the factory dining rooms.

In 1946-7, before Western Ukraine was fully Communized, there was another drought in the black earth region and once again starvation hung as a spectre over the entire population. Those who had the strength and courage to get to Western Ukraine in search of food were surprised how much food there was still to be found in those areas where the peasants were still allowed to use their own energy, skill and knowledge even on their own small farms which still looked like paradise to those poor devils who had passed through the period of the thirties.

Still later, collectivization was introduced into Western Ukraine and the other accompaniments of the regime in the east were at once apparent.

The Fifth Five Year Plan which was adopted in 1950 continued and intensified the process. From the figures which has been revealed, it is obvious that the increases which have been demanded of the Ukraine in this period are relatively minor. There

¹ [Post-WORLD WAR II - 1945 -- Analyst]

p. 3

I. THE EMERGENCE OF NATIONALISM

727 DURING the summer and autumn of 1941 the German armies rolled across the plains of the Ukraine; by November the entire Ukrainian Soviet Socialist Republic was in their hands. Observers everywhere were aware of the significance of the conquest of this huge area with its thirty-five million inhabitants. The agricultural wealth of the Ukraine, famous as the "granary of the USSR," the gigantic industrial complex of the Donets basin, and the rich mineral deposits were weighed in appraising the loss of the Soviet Union and the gain of Germany. While the political effects of the conquest received less attention at the time, in some ways they were even more important than the economic effects.

186 While there is a tradition of separate political development in the Ukraine,¹ modern nationalism—the doctrine that persons of a distinctive culture should constitute an independent state—came late to the area. To a close observer, the first stirrings of nationalism among educated groups in the Ukraine would have been apparent early in the nineteenth century, and by the middle of that century Taras Shevchenko, the greatest name in Ukrainian literature; was giving poetic expression to nationalist aspirations. It was considerably later, however, that definitely political organizations were formed to establish the claim of the Ukraine to nationhood.² For the student of contemporary politics, it is precisely this late emergence of Ukrainian nationalism which

¹ The term "Ukraine" is used throughout this study (except in cases when another meaning is clearly implied) to refer to the territory comprised in the Ukrainian SSR in 1945. Essentially the same area (with the exception of the Carpatho-Ukraine, which is discussed briefly at several points in this study) was included in the Ukrainian SSR in 1941. This territory corresponds fairly closely—except, as noted in Chapter XI, in the east—to the Ukrainian "ethnographical" territory, the area in which the indigenous population speaks Ukrainian.

² John S. Reahetar, *The Ukrainian Revolution, 1917-1920: A Study in Nationalism* (Princeton, New Jersey: Princeton University Press, 1952), p. 12.

Geographical Variations of Nationalism 271

an archdiocese of Kherson at an early date.⁶¹ As was related previously, the *Generalkommissar* was suspicious of the Autocephalous Church and urged that steps be taken against it when it grew strong in the north of his area. Later, Michael (Khoroshyi),^[127] bishop of Kirovograd, was to come to Nikolaev as archbishop, and was recognized by the *Generalkommissar*,⁶² but the pro-Russian ecclesiastical group seems to have maintained a strong position. On the other hand, the extremely large shift in national affiliation in Kherson indicated by the city census suggests that the same factor of adoption of loyalty to the Ukraine as a territorial entity may have been at work here as well as farther north.⁶³ Farther east along the coast, in the *Generalbezirk* Taurien (Taurida), with its capital in Melitopol' (Melitopil'), there appears to have been little effort at nationalist organization; the newspapers, police, and other agencies were Ukrainian, but seem to have been completely subject to German control.⁶⁴

Beyond the coastal strip just discussed lies the most easterly section of the Ukrainian SSR, the Donbas. This area, in which agriculture takes the form of large-scale wheat farming, as in the far south, is known as the "Ruhr"—or better, one of the "Ruhrs"—of the Soviet Union. Its industry, which grew at a tremendous pace in the interwar period, is based primarily upon rich coal deposits. Its five cities of more than one hundred thousand population in 1939 had nearly tripled their total number of inhabitants since the previous census. It is probable that this increase resulted in a substantial gain for the Ukrainian ethnic component, which previously had been very small, as the surrounding peasantry is largely, though not overwhelmingly, Ukrainian. As far as the technical staffs, which composed the bulk of the educated class, are concerned, however, Ukrainian nationalist observers themselves admit that the great majority was drawn from

⁶¹ *Ukrains'ka Diismist'*, January 20, 1942, p. 1. The archbishop was Anthony (Martsenko), who received his appointment in 1941 from the Sobor of Volhynian Bishops. Up to the time of the definite split between the Autonomous and the Autocephalous churches he was apparently still sympathetic to the Ukrainian nationalists as his secretary is reported to have been an OUN member (NO 3279).

⁶² *Deutsche Bug-Zeitung*, March 6, 1943, p. 5.

⁶³ See Appendix.

⁶⁴ PS 1693.

369 The Ukrainian people, being an old nation with an agricultural civilization, is not attracted by industry and by large concentrations of population. It prefers to live in the country, when its material life is assured, seeking to supplement its revenues by semi-agricultural professions such as those of artisan, or small trade, or finally the service of the State.

241 The Ukrainian agriculturalist, especially in the regions of the south, is conscious of participating in the general economy of the country. He takes a great interest in the choice of plants to be developed, in the organization of co-operatives for trade and credit, and in the construction of the means of communication. He is a civilized peasant, a quite European farmer. Without disparaging the intellect and the practical sense of the Great Russian people, it is necessary to recognize that the Ukrainian is more Western in all his conceptions, and more European, than his brother of the north.

163 On the other hand, the Ukrainian people have a great vitality. Among the peoples of Europe they have the greatest rate of increase, which reaches 2.3 per cent per annum. The fecundity of the women is astonishing: between twenty and thirty years it is 23 per cent, while in France it hardly reaches 8 per cent at the same ages.¹

142 The average height of the men at the period of military service is about 1 m. 69½ cm.

137
342 Ukrainians are very clean and their houses very neat, mostly whitened with whitewash and surrounded by gardens. Fruit trees, particularly cherry trees, give the villages an attractive appearance, especially in the districts of Kiev and Poltava (Zone 1)² where the rich and green nature resembles the landscape of Southern England.

¹ That is to say that for a 100 women between twenty and thirty years one meets 23 expectant ones.

² [see Category 116, pp. 139-140. ---Analyst]

- 563 and the Greeks who competed with the merchant Jews in the great ports, where they formed very united and wealthy autonomous communities which to-day have been repatriated or dispersed.

II

Agriculture

- 241 Fundamentally an agricultural land, the Ukraine is particularly the land of cereals.

The incomparable richness of these lands, her temperate climate, and the aptitude of her population have made this branch of human activity the fundamental wealth of the country.

- 134
311 With the exception of the forest regions of the north-west, where sandy soil is met, nearly all the lands of the Ukraine are arable and actually only a few tens of thousands of hectares of waste land remain, which serve as natural pasturages and give an excellent hay which is very well suited for horses.

- 243 About 25,000,000 hectares are sown, of which 20,000,000 are growing cereals.

- [311] The abundance of nitrates in the surface layer of the earth, and its capillary structure, perfect for irrigation, allow the cultivation of the most valuable of cereals—wheat. The area that has been sown with this cereal occupies more than 35 per cent of the worked land of the Ukraine and its production rises to 90,000,000 quintals, representing almost 8 per cent of the world harvest and 18 per cent of the European harvest.

The cultivation of wheat seems to develop from year to year at the expense of barley and of rye, cereals of inferior quality.

From the end of the nineteenth century wheat has

249 are known under the name of 'makborka.' Fine tobacco is only cultivated in the southern region, near the Crimea, and only in small quantities.

243 As to hops, they are spread over the relatively poor lands of Volynia. Since the end of the nineteenth century this crop has experienced a great development in the Ukraine, which has furnished more than 50 per cent of the hops on the markets of the Russian Empire. This, as is well known, is an indispensable product in the manufacture of beer.

Owing to their utilization in the breweries oats can equally be considered as being not only a direct food crop. This would also apply to a part of the potato harvest (total of 1.2 million hectares), which supplies the most important material for the production of alcohol.

248 The cultivation of cotton which was begun five or six years ago in the extreme south of the Ukraine, between the mouth of the Dnieper and the isthmus of Perekop, is a recent industry. We have little information about its possible future and cannot dwell on it. Actually cotton plantations occupy about 150,000 hectares. The employment of a new variety, called the 'non-irrigated cotton,' seems to give satisfactory results.

241 In all that concerns agriculture, the division into agro-climatic zones seems to be entirely justified.

Actually the northern limit of the cultivation of maize and sunflower corresponds almost entirely to the border between these two zones. On the other hand 95 per cent of the land occupied by sugar-beet is to be found in the southern part of Zone 1. This separation is also not quite so definite for the cultivation of cereals, but nevertheless it exists. The greater amount of wheat is grown in Zone 2. Rye and oats, on the contrary, occupy a greater surface in the north. In the case of the two less important cereals, buckwheat and millet, the separation [See category 116, pp. 139-140. --- Analyst]

UKRAINIAN ECONOMICS

157

tion is very clear, buckwheat growing in Zone 1² and 241
millet in Zone 2.7

The great development of agriculture has created a 392
growing demand for agricultural machinery, which
brought about the appearance and the rapid develop-
ment of this branch of industry, concentrated to-day
especially at Kherson, at Zaporozje, and at Kharkov.

Parallel to this a very important industry of food 241
products has developed. These are the great and highly
perfected mills, the sugar refineries, the distilleries, the
breweries, and the tobacco factories which cover the
whole territory of the Ukraine. As auxiliary products
of agriculture, apart from vegetables of all kinds, known
in Europe, the production of which is difficult to
estimate, one can mention the melons, water-melons,
cucumbers, and tomatoes, to the cultivation of which
important tracts have been given.

The production of fruit and grapes has not experienced 245
so great a development. The surface given to fruit
trees (cherries, apples, apricots, and pears) reaches about
250,000 hectares. The most important horticultural
centres are to be found in the region of Ouman, on the
banks of the Dniester, at the mouth of the Dnieper,
and equally in the surroundings of Odessa, which are
famous for their peach trees. The town of Ouman has
a horticultural school and an experimental station which
had already long before the Great War a great agri-
cultural reputation throughout Russia.

The marketable harvest of fruit reached 80,000 tons
before the Great War.

The surplus production of fruits and especially of
vegetables (tomatoes) have brought about the rise and
the rapid development of a food tinning industry which
seemed to offer great possibilities in the future.

As to the vineyards (about 60,000 hectares), they are
2 [see category 116, pp. 139-140---Analyst]

245 found in the extreme south of the Ukraine, on the banks of the Dniester and the Boug (Voznessensk), in the region of Odessa, at the mouth of the Dnieper, and in the region of the rapids near Zaporojie.

Despite the small importance of the vineyards in the agricultural economy of the Ukraine, a great effort has been made by Russia in this sphere. An experimental station for vines has been established near Odessa which has a laboratory for the analysis of the harvests. Highly qualified specialists have made researches there on the growth of native and French varieties for the creation of species adapted to the soil and to the climatic conditions of the Ukrainian vine region.

246 The cultivation of fodder, such as clover and others, are relatively little known in the Ukraine. The lands which are given up to them are almost entirely in the western part of Zone 1, which is over-populated and provided with natural pastures. Their surface does not exceed 1,000,000 hectares. In the Ukrainian Steppe only the natural pastures are of importance. (It is to be hoped that the culture of fodder will develop in the Steppe as it is necessary for the rational enrichment of the land.)

241 Before going on to the question of forestry and to breeding, let us say a few words about the state of agriculture in the lately Polish part of the Ukraine.

Being a natural continuation of Zone 1, with a poorer soil, this country produces a large proportion of rye, which occupies more than a third of the sown surface.

The other crops are barley, wheat, oats, and potatoes, all of which are used by the native population. The cultivation of sugar-beet is very limited.

246 On the other hand the cultivation of fodder is more extensive in Polish Galicia than in the Soviet part of the 2 [see category 116, pp. 139-140---Analyst]

433

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German economists who foresee a perfect collaboration between the Ukraine and Germany ('Germany and the Ukraine supplement one another economically,' wrote the *Volk und Reich* in 1933) make a great mistake or even deceive the public intentionally in continuing to consider the Ukraine an agricultural land. If one compares the national agricultural revenue of the Ukraine with that of her industry, the first is certainly inferior to the second.

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If one day the Ukraine should enter into the German economic system, and if Germany were to export the mineral which she lacks from the Ukraine, what would one do with the immense machine factories, and the coal mines which supply the metal industries, and with the quarter of a million workers of that industry? Let us admit that the Ukraine should become independent and that she should become detached from the Russian economic system, and that by this fact she should become hostile to Russia, who would cease to absorb the surplus of her economy, what would happen then?

Russia would, perhaps, create a new Ukraine in her Asiatic possessions. The wealth of the subsoil of Western Siberia is far greater by many times than that of the Ukraine. Metal is also more abundant. The soil of Siberia is more fertile and the possibilities of agricultural development are immense. That is not all. What would the Ukraine do with the surplus of her agricultural population, whose average density is greater than that of Germany, and which could emigrate, to-day, to Siberia and found colonies as it pleases? Is there another country in the world which will accept so great an emigration?

If the Russian Empire, backward though it is supposed to have been, has been able, during hundreds of years, to transform the wild Steppes into an industrial and

the industrialisation of Russia. The production of the heavy industries in Ukraine gave in 1931 63% of the whole output of coal, 83% of the production of coke and 77% of iron ore of the USSR (*Izvestia*: Moscow, March 1, 1932). "The production of the Ukrainian plants solves the entire problem of metals in the whole Soviet Union" — the Kharkov *Communist* wrote on October 13, 1931. With these demands on the Ukrainian national economy Moscow placed the workers of Ukraine in the worst conditions. In the wage index the Ukrainian metal workers stood in 1931 in the 11th place, the miners in the 19th, the coke workers in the 27th place (*Izvestia*: Moscow, February 1, 1932). The conditions of work, dwelling, social insurance and cultural service of the workers in Ukraine were much worse than in Russia. 185
[433]

The forced collectivisation of the Ukrainian agriculture, started in 1929/30, caused horrible devastation among the Ukrainian peasants. Not less than 200,000 farms were destroyed, their property was taken into the collective farms (*Communist*, Kharkov, December 21, 1934). The owners of these farms, the so-called 'kulaks', were deported together with their families into the North of Russia, where they mostly died of hunger and disease caused by forced labour. If one counts a normal Ukrainian peasant family at least 6 persons the number of those ruined and destroyed by this collectivisation reached 1,200,000 persons. In reality the number of the victims of Stalin's 'General Line' was much greater. 474
241 ●
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This 'liquidation of the kulaks as a class' has not only taken the lives of millions of Ukrainian farmers: it has destroyed the best elements among the peasants. These peasants were no 'exploiters': they were able farmers who tilled their land in the sweat of their brows and produced grain for their families and for the market. Due to this absurd and cruel 'liquidation of the kulaks' the shortages in the supply of agricultural products grew enormously.

Simultaneously with the 'General Line' the centralisation in Ukraine to Moscow's advantage was tightened: in the administration, in both economy and cultural work. In November 1929, the Commissariat of Agriculture of Ukraine was abolished and Ukrainian agriculture was subordinated directly to Moscow. The autonomy of Ukraine in the field of education was considerably restricted; in 1931 the separate Commissariat of the Interior in Ukraine was abolished; in 1933 the Commissariat of Justice was subordinated to Moscow, etc. 871
[241]

According to the directives from Moscow the Ukrainian culture had to be 'national in form, Communist in content'. Therefore

alleviate these conditions various measures have been adopted, such as the easement or complete extinguishing of the burden of the purchase-price of the *nadyel*, the prevention of its frequent redistribution, and the founding of the Peasants' Land Bank by the State to facilitate further purchases of land by the communes. Nevertheless, a result not looked for by the framers of the law abolishing serfdom has followed, namely the creation of a large landless agricultural proletariat, which tends to sink in the social scale, to live partly by industry in the towns, and to be migratory in its habits.

The law of 1906 introduced for the first time the general principle of individual and permanent ownership of *nadyel* lands. It aimed at the breaking up of the *mirs* as no longer fulfilling a need, in the expectation that security of tenure by the individual would lead to a more rational and successful system of cultivation. The period since the promulgation of the law is too short to allow of sound conclusions as to its effect.

The *nadyel* lands are almost entirely cultivated on the three-field system, each unit of land being planted one year with a winter-sown grain, the following year with a spring-sown grain, and lying fallow in the third year. This method causes a disastrous impoverishment of the land, especially as in many cases the minimum of manure, whether animal or chemical, is used. An alternative method must be introduced, or the productiveness of the black-soil land under peasant ownership will continue to shrink as heretofore.

The land held by private owners is in general their perpetual freehold, and can be roughly divided into that held by the nobility in large estates and the smaller holdings purchased from them since the abolition of serfdom by prosperous peasants and others desirous of embarking on agriculture on their own account. There are also a number of foreign colonists, chiefly Germans, descendants of those introduced into the country

425 by the Government at various times between the middle of the eighteenth century and 1861, in the hope that their superior methods of agriculture would be copied by other cultivators. This effect, however, was not produced, and the colonists form compact communities with little or no influence on their neighbours. Land in private ownership is usually farmed on more modern and rational principles than the *nadyel* land, and produces almost the entire surplus of cereals which is sent abroad and to other parts of Russia.

421 The land owned by the Church, Crown, and members of the Imperial family is absolute freehold, and is generally well managed and productively farmed.

407 Up-to-date agricultural machinery is becoming more
412 common all round. It is of course most in vogue on the large estates, especially in the case of expensive machines involving the use of power; steam-ploughs on the cable system are much in use on the large sugar-beet estates, and tractor ploughs with single engines are becoming numerous. By the help and enterprise of the *zemstvos* the peasants are now beginning to use modern machines and implements. The traditional *sock* or wooden plough, the flail, and other such primitive tools are disappearing, although it is hard to induce the peasant to abandon his old methods.

(c) Forestry

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[31] A large portion of the Ukraine is totally denuded of trees at the present time. The Governments of Podolia and Volhynia, and the northern parts of Kiev and Chernigov, are well wooded, the area covered by forest being about 15 per cent. of the whole. In the remaining provinces the forest area averages 3-4 per cent. of the total. The State controls certain areas north of Kiev on both banks of the Dnieper, and in Volhynia on the south side of the Pripet marshes, as well as smaller scattered tracts in Podolia. In the Government of Yekaterinoslav the State has lately done much

716 appeased, exorcised. When the priest of Velykyi Lypnyk consecrates the water of the village brook on the sixth of January, the people believe that the demons are thus driven away.

326 The men of Velykyi Lypnyk are tinkers, a
221 trade which in many places has a bad flavor. It is easy to say that they travel about the country like gypsies. But even though they wander from village to village, a small bundle of tools on their backs, repairing stoves and mending pots, they are, nevertheless, not homeless. As soon as spring comes, poverty drives them out on the road, and only late in the fall when the first white flakes begin to fall, they return to their wives and children with the few groschen they have saved.

• 241 For land is scarce, the clod of earth small, the soil is poor and the climate harsh.¹ The women work like drudges for their bit of barley bread and potatoes. With their small cows and a wooden plough they till the lower slopes of the mountain ridges. They sow by hand, harrow, and in the fall they cut off the barely ripe ears of grain with a sickle.

286 In their "spare time" these women² with their
271 strangely narrow faces sit barefoot in their full pleated skirts and pale pink blouses, a charming little cap on their heads, at their looms and tirelessly ply their shuttle back and forth between the taut threads, or press wool into felt for the jackets and trousers of their husbands.

342 The rooms of these "tinkers"³ are surprisingly large and clean; the kitchen, living room, /10/ bedroom and work room are all in one. The whole structure with adjoining stable and wagon shed is built of wood, the inside unfinished, the outside covered with loam. In order that there be no lack
[189] of magic, carpenters carve three suns into the central roof beam.

184 How rich these "tinkers" of East Slovakia were with their little plot of free earth, their two or three cows, their barley bread and their loom, compared to their brothers in Carpatho-
2 [In the village of Velykyi Lypnyk, Western Ukraine - Analyst]

162 Five hectares of land, if overpopulation is so great that in 49% of the country there are between 80 and 100 /93/ people and in 51% there are more than 100 persons per square kilometer. (52)

52. Kubyovich: The Distribution of the Population, page 35.

476 The ideological center of the Ukrainian cooperative system was the "Revised Union of Ukrainian Cooperatives" with its center in Lwów. At the beginning of 1939 it controlled the four departmental provincial centers with a total of 3455 cooperatives and 673,000 members. The four departmental centers were the "Centrobanka" for credit cooperatives (1889 members at the end of 1938, with an annual sale of 70.5 million zloty); the "Centrosoyuz" for the agricultural buying and selling cooperatives, the "Maslosoyuz" for dairy farmers' cooperatives and the "Narodnya Torgovlia" for urban consumer societies. The private capital of the Revised Union amounted to 23 million zloty at the end of 1938, the savings came to over 12 million zloty. The sales receipts of all cooperatives amounted to 159 million zloty.

• [241] One is almost tempted to speak of a "Ukrainian autarchy" if one hears how much business the buying and selling cooperatives carried on. Galicia and particularly Podolia with its rich black earth and sheltered valleys is rich in fruit, vegetables, legumes, hemp, grain. Cattle-raising is also [233] intensively carried on, especially in the Carpathian foreland. The peasant brought all these products to the cooperative which was ready to serve him and not to profit by him. The cooperatives maintained collection and sorting centers where the products were turned into "standardized" goods. The same cooperative furnished practically everything a farm household needed: shoes, chicory, sugar, kerosene, headgear, candles, seeds, artificial fertilizer and machines. Much of it

575 first half of 1939 threatened the educational
871 work of the "Ridna Shkola" just as it did that
of the women's society, the society of agricult-
urists, the "Provista" and the cooperatives.

871 The efforts of the Ukrainians to raise the
873 level of popular education are admirable. When
at the beginning of their rule in Galicia the
Poles deprived the Ukrainians of their few pro-
fessorial chairs, the Ukrainians forthwith founded
a "Secret University" which gave its lectures
during 1922 and 1923 in private houses. At the
end of each lecture the professors who were taken
partly from universities of East Ukraine, partly
from Austrian universities, announced to their
listeners the time and place of their next lecture.
In the end this "university" collapsed and the
lecturers were arrested.

873 Two years after the enactment of the Ukrain-
ian law of autonomy of 1922 a Ukrainian univer-
178 sity was supposed to have been founded - but in
the summer of 1939 there was not yet a single
Ukrainian professorial chair. In Lwów a Polish
professor lectured on Ukrainian literature in the
●241 Polish language, in /Facing page 96/ /Map VII:
Agricultural Zones Under Cultivation. In the
wooded zones of the north rye, oats and potatoes
predominate. In the northern zones of steppes,
wheat and sugar beets are added (winter wheat in
the west and summer wheat in the east). A third
zone on the Black Sea and the Sea of Azov and in
the foreland of the Caucasus produces wheat, corn
and barley. Adjoining this toward the west there
is a corn-growing zone (with wheat in the north
and barley in the south), whereas toward the
northeast there is a zone extending to the middle
part of the Volga with summer wheat and rye.
Around the Caspian Sea is the pasture area of
desert steppes, in the mountains, woodland and
grasslands with some barley cultivation. The
cultivation of cotton which has been recently
undertaken along the coasts of the Black Sea and

[Bukovina]

•241

the Sea of Azov also deserves to be mentioned./
/Key inside map: I Rye, potato and oats region.
II Wheat and rye region; sub-zone of rye, wheat,
potatoes; sub-zone of rye, winter wheat, sugar
beets; sub-zone of summer wheat, rye, sugar
beets. III Region of wheat, barley, corn; sub-
zone of winter wheat, corn, barley, sunflowers.
IV Summer wheat and rye zone; cotton. V Region
of corn; sub-region of corn, wheat; sub-region of
corn, barley. VI Oats and potato region. VII
Forest region. VIII Grassland (pastures, alpine
pastures, natural meadows). Area with abund-
ant millet cultivation. Area with abundant
buckwheat cultivation. Northern boundary of
region growing abundant amounts of corn. Intensive horticulture. /97/ Cracow a Ukrainian
professor lectured in Polish on Ukrainian liter-
ature, and in Warsaw Polish and Ukrainian pro-
fessors lectured in Polish on Ukrainian literature
and "History of the East" which meant history of
the Ukraine under Polish rule. Moreover, study
in Lwów was made very difficult for Ukrainian
students. Warsaw wanted the Ukrainians to study
in Cracow and in the capital of the country, and
to have them taken out of the Ukrainian environ-
ment and drawn into the Polish one. In this con-
nection a secret numerus clausus proved very
useful: the Ukrainians, in contrast to their
smarter Polish colleagues often failed.

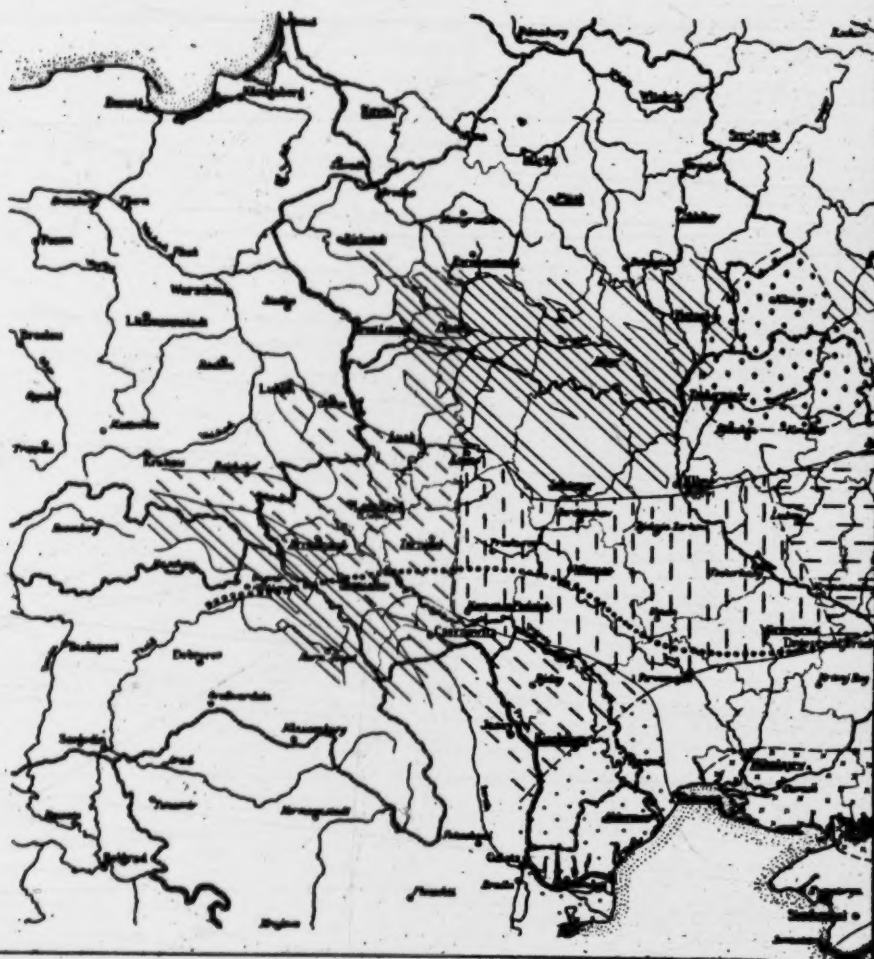
873
178

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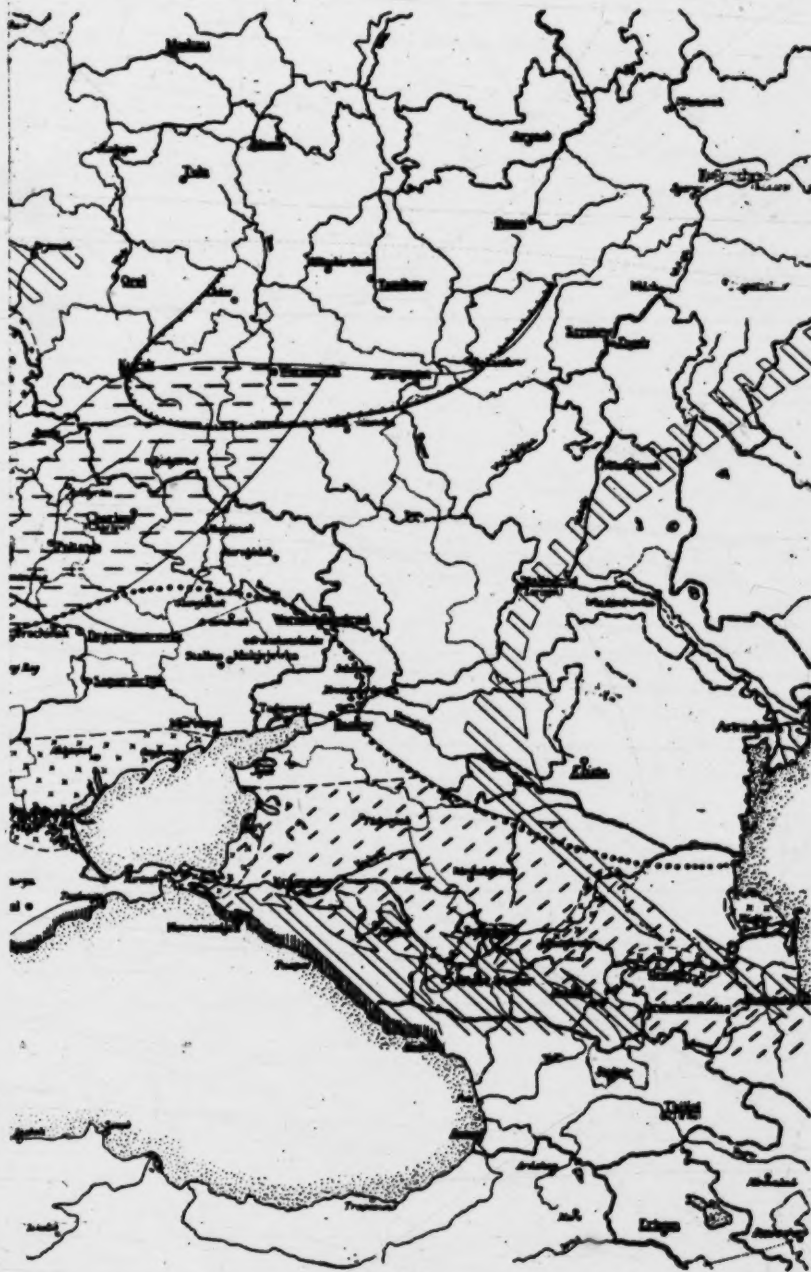
How was the situation in Bukovina? This
little country of 5000 square kilometers on the
northeast slope of the Carpathians in between
the three countries, Poland, Soviet Union and
Rumania, was, until its transfer to the Habsburg
Kingdom in 1776, purely a colonial country of the
Sublime Porte. Under Austria it experienced a
rapid rise, and its chief city Czernovits (now
Chernovtsy) was given the epithet "Vienna of the

•241



MAP VII: Agricultural zones under cultivation,
cf. complete Legend, pp. 99-100]

241



[Map IV. Agricultural zones under cultivation]

/141/

Hunger Overcomes Resistance

178 Bolshevikism tore the Ukrainians away from their past and hurled them, as it were, into a dark, unknown future. They were thrown from one extreme into the other, not only with regard to religion, but also in a social, economic and political respect. They were thrown from unlimited individualism into a society where all are supposed to be equal.

423 When Bolshevik slogans spread through the Ukrainian villages there was a great deal that was ripe for oblivion. Czarist Moscow, the great princes of the Church and the wealthy gentry had exerted themselves precisely to keep the populace in a state of ignorance and to prevent any kind of enlightenment. The masses were thus more tractable and the existing order was not endangered. Nevertheless, with thrift and industry the peasants had succeeded in considerably enlarging their land after serfdom was abolished in 1861, to the detriment of the landed proprietors. In 1861 the peasants owned 45.7% of 48.1 million hectares, in 1916 they owned 65%. (84) The rest was the prop-

[162] 84. Kubiiovich: Geography of the Ukrainian and Bordering Areas, page 360.

erty of the lords of the manor, the church and the state.

423 With the rapid increase in population there
● 241 was a great land shortage, especially in North Ukraine, even after the distribution of land in 1861. Conditions had not improved much since 1830, when the representative of the nobility of the Poltava district reported in the Senate that in his district "there was a perceptible shortage of land and dire poverty". (85) In Podolia,

85. Veit: Farming Economy and Agrarian Set-up of South Ukraine, page 32.

423 Volhynia, and in the northern guberniyas more than
• 241 half the land belonged to large estates before the First World War, and the rest was divided among the small /142/ farmers with many children, who barely earned a laborer's living. Since the small farmers could not live from the yield of their one- to four-hectare fields, they tried to supplement their income by doing other work. They hired themselves out as day laborers to the estates and rented land from the lords of the manor - in the part of the Ukraine on the right bank of the river especially from Jews who, for their part, were tenants on a large scale - for a wickedly high rent.

In the South Ukrainian steppe, which was not settled until late, conditions were different. This steppe occupies about three-sevenths of the surface of present-day Soviet Ukraine. When Catherine II had cleared the steppe of Crimean Tatars and the Caucasian peoples, she sent for foreign colonists, especially Germans to settle the land. The influx of settlers from all sides was so great that in some parts there was a shortage of land even at the beginning of the 19th century, and the descendants of the first settlers were in turn, obliged to emigrate in the middle
241 of the century. But in general there was enough land. Steppe farming which was once pasture farming, underwent a basic transformation. Since grain was well paid, the farmers and estate owners turned the scar of the steppes into arable land; thus what was once rich pastureland became in the end, poor pastureland. In terms of territory, no less than 75 to 90% of the entire soil was arable, so that there was a shortage of feed for the draft animals. People were forced to limit the number of oxen and horses they kept and return to extensive farming, plowing the soil with four light horses and a light plow, rather than with eight heavy oxen and a heavy plow.

241

In the Kuban region the farmers made things particularly easy for themselves. There, around the turn of the century you could see the Cossack riding over the stubble field, not for pleasure, but with a bag of wheat slung around his shoulders, from which he scattered seed between sheer stubbles or even on fallow ground.

A wild grazing culture, the most primitive form of agriculture, in which a field is sown with the same type of seed /143/ until it is exhausted and then is left fallow, was still customary around 1850 in South Ukraine. The next higher stage of agriculture, the three-fallow system, where the soil is alternately cultivated with winter grain followed by summer grain and a year's fallow, has been preserved to this day in Podolia, Polesia and parts of Central Ukraine, in spite of the agrarian revolution. The modern crop rotation system which has long since been introduced in the western and central European countries was not adopted until before the war when it came from Galicia to Volhynia and into Central Ukraine.

The steppe demands its own method of cultivation. Where soil moisture is so slight that clover and potato cultures do not thrive, our crop rotation system is from the start impossible to carry out. Experiments in growing a drought-resistant steppe clover have not yet brought the desired results. Thus for the time being the old method of agriculture is retained in the steppes: winter grain, summer grain (wheat or barley), fallow. Experience has shown that the fallow could be successfully replaced by corn, but the farmers did not want to take up the new culture even at the time of the New Economic Policy, "because of indifference". (86)

86. Veit: Farming Economy and Agrarian Set-up of South Ukraine, p. 93.

241

It is almost unbelievable that in many regions of the steppe the planted surface is not ploughed up, or in any case only superficially with a land-parer. The purpose is to conserve soil moisture. Often the entire sowing, the entire spring work of the farmer consists of a single process. A light land-parer scratches the surface; it has a box attached to it containing the seed, and the harrow is attached to this "ploughing and sowing machine". With this type of sowing one necessarily reaps a lot of weeds.

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438

Nevertheless, before the war the Ukraine enjoyed the reputation of being a granary. During the years 1909 to 1913 the country produced on an average of 8.6 million more tons of grain annually than it consumed. The annual export amounted to /144/ an average of 4.3 million tons of wheat alone and 2.7 million tons of barley. (87) Surplus and export dropped considerably

87. Kubyovich: Geography of the Ukrainian and Bordering Areas, page 390.

under Bolshevik rule. In 1934 only one million tons of grain were exported.

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In 1917, when the Bolsheviks became active, the general feeling in North and Central Ukraine was extremely favorable to an agrarian revolution. The land-hungry peasants were deeply convinced of the fact that the "right of the land-owner was an injustice". Whoever promised the peasants that they were to receive all the land they could themselves cultivate, had won them over to his cause. As a matter of fact, in 1917, at the beginning of the revolution, the lands of the estate owners and the large farmers were immediately divided up, in the process of which the estates often went up in flames and

425 the cattle were burned. However, the glorious
669 state did not last long. The farmers lacked seed,
machines and draft animals in order to cultivate
the land they so easily obtained. Besides, the
men who came back from the war and the landless
village farmers wanted to have a share in the
booty. In the guberniyas of Kiyev and Khar'kov
the government claimed the forests and the exten-
sive beet fields. Civil wars, drought and epi-
demics carried off hundreds of thousands of
peasant families during the years of the Bolshevik
war. Thus ended the first chapter of the agrarian
revolution, so eagerly awaited.

423 The New Economic Policy with its tolerance
• 241 of a "bludgeoned private economy" constituted
the second chapter. The peasants obtained their
land and their farms on long leases; they could
cultivate their land as they pleased, except that
the farm could not be carelessly run, otherwise
the management of the establishment could pass
over into other hands. Nothing was gained by
the fact that all the land belonged to the commun-
ity. The "communal fields" were a Russian form
of possession which had found favor at the time
of Catherine II in the steppes and in the part of
the Ukraine on the left bank of the river. Even
497 though the farmer could not dispose of his land
at any time like a free /Facing page 144/ /Map
IX: Railroad Communications. The main lines of
communication run in a north-south direction,
whereas the east-west lines have always been
neglected./ /Key: Number of daily passenger trains
423 in 1935./ /145/ estate owner, even though he was
241 obliged to acquiesce to the fact that the entire
community property was redistributed every 10 to
20 years; nevertheless, he could do as he pleased
on his section of land. No less than 88.9% of
peasant land in the Ukrainian steppes belonged to
the communities, and in North Ukraine, 80.4%.
The czars had condoned this form of ownership,
because it simplified administration, facilitated

423 tax collection and, finally, also corresponded
● 241 to the patriarchal order. It was only in the
former Polish Ukraine on the right side of the
river that purely private ownership was retained.
The Bolshevik NEP now very cleverly fastened on
to the community field system.

241 With the restoration of peace and order during
the NEP years the social life of the peasant
country again attained its equilibrium. The
families which before that were broken up or dis-
membered now came together again. At the same
time, great efforts were made to raise the pro-
ductive capacity of the new family farms by means
of technical education, and in this the young
farmers were particularly eager to join. At that
time, a German observer wrote: "In the activity
of the youth organizations in the villages we see
an expression of the deep longing to be freed at
last from 'the power of darkness' and not always
to stand apart while the civilized races divide
up the treasures of the earth among themselves."
(88)

88. Veit: Farming Economy and Agrarian
Set-up of the South Ukraine, page 69.

423 This hopeful development was abruptly inter-
241 rupted by the subsequent third phase of the agra-
474 rian revolution, the transfer of the individual
185 peasant farm to communal ownership of all village
inhabitants. It was only by means of collectivism,
the coordination of the farms with the communes in
the other economic fields, that the Bolshevik
regime could last; it was only in this way that
one could strike at the root of Ukrainian nation-
alism, and only thus carry out the Five Year Plan.
For industrial development with the purchase of
foreign /146/ machines had to be paid for by ex-
porting agricultural products. All that was
needed now was a command, in order to maintain
the export of the necessary amounts of grain at
the prescribed price.

474 goats and poultry, whereby allowance was made for regional variations. Thus Kuban Cossacks may also keep a horse, and their individual property around the farm can be two hectares in size.

474
233 The census of cattle in 1935 showed that these concessions were necessary. This census showed that livestock in the Soviet Union had been reduced to about one-half from 1928 to 1935. At the same time the minimum during the summer of 1933 had already been overcome, and there was a gradual increase in cattle-raising noticeable. From 1928 to 1935 the number of horses had decreased from 5.5 million to 2.5 million, that of horned cattle from 8.5 to 4.9 million, the number of pigs from 6.9 to 4.8 million, and that of goats and sheep from 9.8 to 1.8 million. Conditions were similar in the Kuban region. (94) The Kolhosp /abbrev. for 'collective farm' in Ukrainian; Kolkhoz in Russian. Editor/ had completely failed

94. Kubyovich: Atlas of the Ukraine and the Bordering Areas, page 38.

in cattle-raising.

*

•241 What is it that grows in the region of the Soviet Union settled by Ukrainians? Individual cultures have always been subject to considerable fluctuation. During the NEP period the cultivation of wheat receded and rye cultivation increased. The land was extensively farmed, few horses were kept and more sheep. Then came the Bolsheviks and introduced their "rational method of cultivation". That the result of it is not satisfactory was admitted by Stalin at the Eighteenth Congress in March 1932, when he stated that collectivism in the Soviet Union had, it is true, embraced 93.5% of the entire peasantry, but that he could not

- 24) conceal the fact that the grain harvest of 1938 was only one-sixth larger than that of 1913, whereas the population had increased by nearly 30%.

According to the latest statistics, 80% of the entire arable soil is cultivated, while 20% of it is left fallow. Of the total cultivated surface of all Ukrainian provinces, 76% is planted to grain, 57% of which consists of wheat /151/ and rye, 33% of barley, oats and corn, 10% of millet and buckwheat. Of the entire cultivated area 9% is occupied by industrial plants, chiefly sugar beets and sunflowers, 8% by potatoes, vegetables and legumes, and 7% by fodder. Of the 160 million hectares of land planted to wheat throughout the world in 1933, 12 million hectares fell to the Ukrainian provinces. This gave them third place after the USA with its 17 million hectares and British India with 14.6 million hectares. (95) But the hectare yields in the

95. Kubiyovich: Geography of the Ukrainian and Bordering Areas.

Ukrainian provinces are uncommonly low according to German ideas and in view of the excellent soil. They amount to 9.2 doppelzentner /two hundred weights = 100 kilograms = 220.50 lbs./of wheat (Germany: 22 doppelzentner) and 9.2 doppelzentner of rye (Germany: 17.5 doppelzentner). (96) The

96. Deminskij: "The Economy of the Ukraine" in Deutsche Berufserziehung, Number 15 and 16, page 135.

careless method of cultivating the soil, on the one hand, and the insufficient amount of precipitation on the other, are to blame for these low yields.

- 249 The sunflower is a cultivated plant that is little known in our country. Its region of cultivation begins in eastern Podolia, runs along

I INTRODUCTION

- 101 The Ukrainian Soviet Socialist Republic (the Ukraine) is one of the U.S.S.R.'s sixteen constituent Union Republics. Situated in the south-western corner of the Soviet Union, the Ukraine is bordered on the south by the Black and Azov Seas and the Crimea (part of Russia); its western border touches the frontiers of Rumania, Hungary, Czechoslovakia, and Poland as well as the Moldavian Soviet Socialist Republic. Towards the north the Ukrainian S.S.R. verges on two other Soviet Republics: Byelorussia and Russia; and it is the Russian neighbourhood of the Don river which forms the Ukraine's eastern border.
- 101
135 In economic development and in population the Ukraine is second greatest of the Soviet Republics. It has a fertile soil, a mild humid climate, and is rich in deposits of coal, oil, iron, manganese and salts, as well as in building materials. It has four main rivers: the Dnieper (third largest in Europe), the Dniester, the Bug, and the Donets (a tributary of the Don), which are navigable and are also useful reservoirs of power.
- 433
162 Before 1941 the Ukraine contained more than one-fifth of the inhabitants of the entire Soviet Union. Its industry produced 54 per cent. of the coal, 60 per cent. of the pig iron, 48 per cent. of the steel, and 35 per cent. of the manganese ore turned out in the whole U.S.S.R.; it manufactured railway engines and cars, tractors, turbines, harvester combines, and mining and agricultural machinery for all parts of the Soviet Union. "It also produced artificial fertilizers, soda, glass and cement. The output of the sugar, meat-packing, flour-milling, distilling, and dairy industries reached great dimensions. Fishing was developed in the Black Sea and Azov Sea. The Dnieper Power Station, the largest in Europe, was famous throughout the world. The cities of the Ukraine, both old and new, developed rapidly; during the past 25 years 77 new cities and 285 industrial settlements were built."¹
- 361
- 241 Agriculture also was highly developed. In 1937-38 Ukrainian farms accounted for nearly one-fifth of the grain, one-sixth of the potatoes, and two-thirds of the sugar beet produced in the Soviet Union. The Ukraine also had a large proportion of the total Soviet Union livestock. Millions of head of cattle, pigs, sheep, and poultry were raised. Ukrainian agriculture was highly mechanized; before the war there were 90,000 tractors and 31,000 harvesting combines operating in the fields.

Area and Population

- 131 In January 1939 the Ukrainian Republic had an area of about 469,700 square kilometres including 8,000 square kilometres in its

1 The Sixteen Soviet Republics, Soviet News, London, 1945.

727 by the German invaders in the Ukraine, and more than two million had been abducted to slavery in Germany. Of these so deported, a considerable number perished in captivity¹.

162
666 The figure of four million Soviet citizens murdered in the Ukraine does not clearly indicate whether all of them were Ukrainians or whether a certain percentage came from other parts of the Soviet Union. No figures have been revealed showing the number of the Ukrainians killed at the front against the German armies and their satellites. However, a comparison of the pre-war and present electorate figures for the Ukraine gives some indication of the decrease, at least of the adult population. On December 12, 1937, the Ukrainian electorate was about 17,540,000; in 1939 this number was increased by the addition of Western Ukraine, which on March 24, 1940, had more than five million voters. But nearly seven years later, in the elections of February 1947, despite the fact that part of Bessarabia, Northern Bukovina, and the Transcarpathian Ukraine also had been added, the total electorate in the Ukrainian S.S.R. was only 21,545,000.

Damages to Industry and Agriculture

727
433 The damage which the Germans inflicted on the industry and farming of the Ukrainian and Byelorussian Republics was tremendous, and far exceeded any comparable destruction in Western Europe.

[362] In the Ukraine the Germans destroyed or burned down 714 towns and more than 28,000 hamlets and villages, destroyed more than two million buildings and 540,000 outbuildings, and rendered about 10 million persons homeless (one-fourth of the Ukrainian population)².

Agriculture, animal husbandry, and industry were devastated. The coal mines were flooded. Over 16,150 industrial enterprises employing more than two million workers were stripped of machinery and the buildings heavily damaged or destroyed. The Germans wrecked or took away 127,800 electric motors and 81,600 metal-cutting lathes, destroyed railway lines and stations, and post and telegraph offices².

727
433
241 Tremendous damage was done to Ukrainian agriculture. The Germans ruined and plundered collective farms, state farms and machine and tractor stations.

Millions of hectares of planned fields were destroyed and over 56,000 tractors wrecked. Nearly 1,900,000 agricultural machines and 30,000 automobiles and other motor vehicles were destroyed or taken to Germany³.

1 Soviet News, London, June 29, 1946.

2 Soviet Monitor, London, February 8, 1947.

3 Letter to UNRRA from Ukrainian Government Department of UNRRA Supplies, April 6, 1946.

727
439 been food supplies, which in many Ukrainian towns constituted the only
648 food to be seen in shops in 1946. For fats and oils particularly the
Ukrainian population has been entirely dependent on UNRRA aid.

The U.S.S.R.'s Five-Year Plan, 1946-50

727
649 UNRRA assistance to the Ukraine has been of necessity limited in
scope and short-term in nature. Long after relief shipments are ended -
and they are now all but complete - the Ukraine will still be working to
rebuild its factories, cities, and farms. The main task of rehabilita-
tion is therefore a long-term one, and depends upon long-range measures.

727
185 On March 18, 1946, the Supreme Soviet of the U.S.S.R. adopted a
Five-Year Plan, 1946-50, for the rehabilitation and development of the
national economy of the Soviet Union. This plan is the fourth of a
series of Five-Year Plans¹ designed to increase the productivity of
Soviet farming and industry, and in general to raise the standard of
living of the whole population. As stated by the Supreme Soviet of
the U.S.S.R., the principal aims of the Five-Year Plan in 1946-50 are to
rehabilitate the devastated regions of the country, to recover the pre-
war level in industry and agriculture, and then considerably to surpass
that level.

[652] The new Five-Year Plan provides that nearly one-third of the capital
investments for the entire Soviet Union in 1946-50 (49,500 million roubles
out of a total of 250,300)² are to be spent on the restoration of the
Ukraine. Of this 43,500 million, 5,469 million will be used for works
under the Ukrainian Republic's jurisdiction.

361
727 In the next five years all the destroyed cities of the Ukraine -
and Zaporozhie - are to be rebuilt and their municipal services restored.
362 Housing is to be replaced as speedily as possible; in 1946-50, 175,120,000
square feet of state-owned housing are to be built, of which 12.65 million
square feet are to be made available by local Soviets. The amount of
privately owned housing to be built before 1950 is fixed at 36.3 million
square feet.

241
185 Also under the Five-Year Plan Ukrainian agriculture is to be rehabili-
tated; the crop area for 1950 is planned at 30.5 million hectares. By
1950 the Ukraine is scheduled to be producing about 20 per cent. of the
grain harvested in the U.S.S.R. (approximately the same tonnage as in pre-
war years); 60 per cent. of the sugar beet (about 6 per cent. more than
pre-war); and the potato harvest is fixed for 23 million tons, 1½ millions
more than in 1940.

000 Industry is to be revived; railroads and other forms of transport

1 First Five-Year Plan, 1929-32; second, 1933-37; third, 1938-42.

2 Estimated at 1945 prices.

II FARMING IN THE UKRAINE: PRE-WAR AND PRESENT

241
433 The Ukraine - famous for its mild climate and rich black soil - has always assumed a role of considerable importance in the agricultural production of the Soviet Union. For example in 1937-38 it produced one-fifth of the grain, two-thirds of the sugar-beet, and one-sixth of the potatoes harvested in the whole U.S.S.R. The chief grain crops of the Ukraine are wheat, rye, barley, oats, maize and millet. A considerable amount of sunflower seed is produced for processing into oil; small quantities of linseed and mustard seed are also produced for the same purpose. Other industrial crops, particularly flax, hemp, a little cotton and the rubber-bearing dandelion, "kok-sagyz" (discovered in 1931), were also cultivated extensively in the Ukraine before the war.

The following table shows the area and production of the principal Ukrainian crops in 1928, 1932 and 1937; figures for production in the entire Soviet Union are included for comparison.

TABLE IV

Ukraine: Pre-War Agricultural Production
(area in million hectares, production in million metric tons)

	Ukrainian S.S.R. Area	Production	Entire Soviet Union Production
Wheat			
1928	3.1	3.34	22.11
1932	5.743	5.6	20.31
1937	6.433	10.08	46.86
Other grain			
1928	16.6	10.55	50.73
1932	12.381	9.06	49.48
1937	11.761	12.69	73.43
Sugar beet			
1928	.647	8.42	10.13
1932	1.174	4.28	9.645
1937	.817	14.44	21.86
Cotton			
1928	nil	nil	.824
1932	.181	.03	1.28
1937	.224	.12	2.58
Potatoes			
1928	1.4	10.21	46.38
1932	1.071	7.72	43.07
1937	1.338	11.9	65.63

Source: Compiled from Socialist Construction, Moscow, 1936 and 1939; Scarc Areas of the U.S.S.R., Moscow, 1939; and Socialist Agriculture, Moscow, 1939.

-16-

311 Despite a certain reduction in the area under cultivation in the
 • 241 Ukraine, (25,124,900 hectares in 1937 as compared with 26,438,400 in
 [407] 1932), production rose considerably, reflecting great progress in the
 [475] mechanization of agriculture. The number of tractors increased from
 51,300 in 1932 to 83,900 in 1937. The number of harvesting combines
 increased in the same period from 4,900 to 26,700. The number of
 Machine and Tractor Stations grew from 657 to 958. The mechaniza-
 tion of agriculture in the Ukrainian S.S.R. is shown in the following
 table, which compares the output of energy from draught animals with
 the energy derived from machines, both in the Ukrainian Republic and
 in the entire Soviet Union. (It should be noted that, according to
 Soviet practice, the output of energy is measured in kilowatt hours.)

TABLE V

Output of Energy in Agriculture, 1938
 (million kwh)

	Ukrainian S.S.R.	Total Soviet Union
[407] Energy from machines	4,211	19,304.2
379 Energy from draught cattle	1,662	14,667.5
Total output of energy in agriculture	5,873	33,971.7

Source : Planned Economy XII, Moscow, 1940.

[178] As the table shows, the percentage of mechanization in the Ukraine
 was greater than in the entire Soviet Union.

-17-

Agricultural Development of the Incorporated Territories

311 According to the Concise Yearbook of Poland, London, 1941, there
 425 were in 1938 over four million hectares of arable land and 190,000
 125 hectares of orchards and market gardens in Western Ukraine. The principal crops grown were wheat, rye, barley, oats, potatoes, and sugar beet.

Before 1939 farming in Western Ukraine was carried out on a very primitive level. After the incorporation of this region into the Ukrainian Republic, however, great changes were made. On October 28, 1939, the People's Assembly of Western Ukraine decreed the confiscation of large land estates, and subsequently, according to the Moscow periodical, Soviet State and Law (1941-III), over one million hectares were distributed among 400,000 landless farm workers and small holders. Similar changes occurred in the other incorporated territories. In the northern part of Bukovina, (in the Chernovitsy Province joined to the Ukraine) 200,000 hectares were distributed among landless workers, while in the Izmail (former Akkerman) Province, Bessarabia, 65,000 hectares were divided.

474 Apart from the confiscation of large estates and the re-distribution
 241 of the land, two further processes could be observed in these areas
 178 from the time of their incorporation until Germany attacked the U.S.S.R.: the organization of peasant holdings into collective farms, and the increased mechanization of agriculture. By September 1940 there were 400 collective farms in Western Ukraine; by January 1, 1941, the number had increased to 571, in which there were organized 34,000 peasant farm holdings. (These numbers do not include 535 "initiative" groups for the creation of collective farms with 14,000 peasant farm holdings.) In Northern Bukovina (according to the same source Soviet State and Law, 1941-III) the first seven collective farms with 3,000 hectares were also founded.

475 Mechanization also advanced rapidly. In the western part of the
 407 Ukraine 170 Machine and Tractor Stations were established in the first year of incorporation into the Republic. In 1941 in the Izmail Province, 27 Machine Tractor Stations were being built, and in the Chernovitsy Province, 13.

475 In the Transcarpathian region (incorporated into the Ukraine in
 407 June, 1945), nine Machine and Tractor Stations were established in
 652 1946 to assist the work of the fields. The Five-Year Plan 1946-50 provides for special attention to the farms of Transcarpathian Ukraine in the form of machines, fertilizers and credits to increase agricultural production in this region, the pre-war output of which was as follows.

TABLE VI

U
●241 Transcarpathian Ukraine: Area and Production of Crops in 1937
433

	Hectares	Average yield in metric tons per hectare	Total production in metric tons
Wheat	31,476	0.7	20,796
Rye	25,679	0.62	13,773
Barley	3,351	0.48	1,396
Oats	30,527	0.45	13,124
Potatoes	46,253	8.72	397,347
Sugar beet	96	23.86	2,291

Source: Statistical Handbook of Czechoslovak Republic, London.SU
241 The Organization of Farming in the U.S.S.R.

It may be well at this point to outline briefly the methods of farm organization which characterize the Soviet Union.

SU
474 The Collective Farms (kolkhozes)
241
433

The foremost agricultural problems of the Soviet Union have been to increase the area under cultivation, to improve the methods of production, to raise yields per hectare as well as total production, and from this increased production, to ensure that adequate supplies of food reach the towns and factories. The primary means of achieving these aims was the organization of individual peasant farms into collectives (kolkhozes). By 1932, the end of the first Five Year Plan, this transformation was largely completed.

SU
242 During the second and third Five Year periods the policy of using
474 the most modern methods of scientific farming in the kolkhozes was
407 continued. Thousands of tractors, threshing machines, combines, mowing
machines, binders, and other large machines were produced for use on the
collective farms, and were concentrated by the government in Machine
and Tractor Stations (M.T.S.), which served the kolkhozes for a legally
fixed fee, paid in kind.

SU
475 The M.T.S. are now a well-known feature of Soviet farming. They
407 have their own workshops and staffs of mechanics and farm-hands. The
241 average equipment of an M.T.S. before the war was 84 tractors
(approximately 15 h.p.), 22 combine harvesters, 14 threshers, and a
proportionate number of ploughs, harrows, drills, etc. Each M.T.S.
works for a group of kolkhozes, usually about 30, and carries out all
the mechanized agricultural work (ploughing, sowing, harvesting,
threshing, etc.). Apart from these mechanical services, the M.T.S.
gives qualified advice on rotation, technique, financial matters, etc.

1 What Are Collective Farms, V.A. Karpinski; Lindsay Drummond, London.

-20-

SU
474
433 which the kolkhoz members were permitted to keep¹ were performing this
438 task, furnishing the city markets with meat, dairy products, eggs,
472 poultry, vegetables, fruit, honey, mushrooms, and berries.

SU
474
[442
434] In April 1940, in order to provide a wider incentive for the
kolkhoz members to increase their collective production, the system of
delivery assessments was radically changed. Whereas the basis for
grain deliveries to the government had previously been the amount of
land sown or, in the case of meat, milk, eggs and poultry, the size of
the herd or flock, the new basis for assessments was the amount of land
held by the kolkhoz; and any production above the fixed rates could be
retained by the kolkhoz for distribution among the members according
to labour days.

U
461
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241
445 A second decree applying to the Ukraine alone established supple-
mentary pay for increasing the crop yield or productiveness in the
raising of livestock. This decree directed the collectives of the
Ukraine to assign various sections of the field or garden to work teams,
working to produce a fixed quota. If the production did not exceed
the quota, the members were paid only by the labour day; but if a team
produced above the quota, it received part of the excess as bonus.

SU
423 In 1934 the Soviet Government decided to permit individual members
of the kolkhozes to keep private farmsteads within the limits of $\frac{1}{2}$
to 1 hectare. A year later the code for the kolkhozes (called the
"Stalin Code") confirmed these rights. It also secured forever the
land held by the kolkhozes:

"All boundaries formerly separating plots of land belonging to
members of co-operatives are hereby abolished, and all their
holdings are pooled together to be used in common...the land
occupied by the kolkhozes (as all land in the U.S.S.R.) is
public government property. It is...secured to the kolkhozes
for use without time limit, that is in perpetuity, and not
subject to buying, selling or leasing to anyone by the co-
operative... All agricultural production on kolkhoz land,
shall be carried on by the members of the kolkhoz, jointly, co-
operatively... Out of the land held in common a small part
shall be set aside for the use of each household (for truck garden-
ing, orchards, etc.)... The dimensions...may vary...from $\frac{1}{2}$
to $\frac{1}{2}$ hectare and in certain regions up to one hectare".

1 [sic-- ANALYST]

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TABLE VIII

Productivity of Ukrainian Collective Farms in 1938
(expressed in percentage of 1934)

	Area under cultivation	Yield per hectare	Gross output
Grain	88.0	176.0	157
Sugar beet	98.0	164.0	161
Sunflower	89.0	208.0	171
Flax	126.0	140.0	290
Cotton	146.0	671.0	986

Source: J. Statsenko "Productivity of Work in Collective Farms in the Ukrainian S.S.R." Planned Economy, Moscow, 1940/I.

As the table shows, the area under cultivation of grain, sugar beet, and sunflowers decreased somewhat; however, average yields per hectare and total production were increased by 75 to 100 per cent. This increase in productivity was brought about by improved cultivation methods: the use of selected seeds, chemical fertilizers, more scientific crop rotation and above all, by the greater mechanization of labour. As we have seen, the Ukrainian had in 1938 nearly a thousand Machine and Tractor Stations, as compared with 657 in 1932. The effect of mechanization in the collectives is best shown by the fact that whereas in 1932 the U.S.S. cultivated 77.1 per cent. of the arable area of the Ukrainian kolkhozes, by 1937 they were sowing 98.8 per cent. of the collectives' entire arable land.

Since 1938 (the last year in which comprehensive agricultural statistics for the U.S.S.R. were published) there has been little information available about agricultural production in the Soviet Union. The figures which have been made public emerge from press or conference reports, and the information is usually very scanty. The immediate pre-war picture is therefore not clear.

We do have, however, the planned 1941 area of cultivation in the U.S.S.R., as well as the percentage of increase over 1940. From these figures we can estimate the sown areas in 1940, as the following tables show.

TABLE IX

U.S.S.R.: Planned Area of Principal Crops, 1941

	Planned area 1941 in million hectares	Per cent. increase on 1940
Grain	111.1	0.2
Industrial crops	12.0	1.7
Vegetables, melons, potatoes	11.4	12.9
Fodder crops	22.5	24.3
Total	157.0	3.9

Source: Report of N. Voznesensky, Chairman of the State Planning Commission of the U.S.S.R. delivered on February 18, 1941, at the Eighteenth All-Union Conference of the Communist Party of the Soviet Union.

Using these figures as a basis, we have the following areas for 1940.

TABLE X

U.S.S.R.: Area Sown in 1940
(in million hectares)

Grain	110.9
Industrial crops	11.79
Vegetables, melons, potatoes	10.1
Fodder crops	18.1
Total	150.89

Source: Calculated on the basis of Table IX.

Although we do not have similar figures for the Ukrainian S.S.R. alone, we do know that in 1940, 612,000 hectares were sown to sunflower, and 764,000 to sugar beet. The harvest of sugar beet amounted to 14.8 million tons (an average of 19.4 tons per hectare). In the same year the harvest of grain was over 28 million tons, and of potatoes, 21.5 million tons.¹

1 Pravda Ukrainy, Kiev, August 28, 1946.

241 In comparing these figures with 1937 production the increases in the area
433 of the Republic must be borne in mind.

Effects of the War on Ukrainian Farming

727 When the German armies were finally driven out of the Ukraine in
241 1944 they left most of the Republic's farmsteads completely in ruins.
474 So great was the devastation which they wrecked that even today the
full extent of it is not definitely known. It has been estimated by
Ukrainian officials, however, that the invaders ruined and plundered
27,110¹ of the Ukraine's collective farms and 872¹ of the state farms,
burning the buildings and wrecking or stealing the machinery. The
Germans also wrecked over 422,000 collective farm buildings and
425,000² privately owned farm buildings², scorched and laid waste millions
of hectares of farm land, and destroyed 1,500¹ machine and tractor
stations. The consequent losses of machinery were enormous. Fifty-
six thousand tractors, 24,000 harvester combines, 30,200 trucks and
automobiles used in farming and 1,892,000 other agricultural machines
were destroyed or stolen by the Germans. The ~~next~~ table shows the
losses compared with pre-war numbers.

1 Statement by Mr. I.S. Senin, Deputy Chairman of the Council of Ministers of the Ukrainian S.S.R. at a meeting of the Deputy Foreign Ministers on February 7, 1947, published in Soviet News, London, February 8, 1947.

2 Department of UNRRA Supplies of the Ukrainian Government, Kiev, April 6, 1946.

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TABLE XI

Ukraine: War Losses of Farm Machinery

	Number before the war	Destroyed or wrecked by the Germans
727 ●241 407 Tractors	over 90,000 ¹	56,000 ²
Harvester combines	" 31,000 ¹	24,000 ²
Trucks and cars used in agriculture	" 50,000 ¹	30,200 ³
Other farm machines	n.a.	1,892,000 ³

- 1 Source: Mr. Baranovsky, Member of the UNRRA Council for the Ukrainian S.S.R. Speech at the Fourth Session of the UNRRA Council on March 20, 1946, Atlantic City, UNRRA Journal, Volume IV, No. 6.
- 2 Source: Statement of the Soviet Commission on Material Damage Caused by the German-Fascist Invaders, Soviet News, September 18, 1945.
- 3 Source: Letter to the UNRRA Mission to the Ukraine from Mr. V.V. Khomyak, Chief, Ukrainian Department of UNRRA Supplies, April 6, 1946.

In addition to the spoilage of buildings, machinery and land, the Germans seized, slaughtered, or drove away millions of farm animals, and stole from the collective farms or from private citizens of the Ukraine over 12 million tons of farm produce, including 9.5 million tons of grain and flour¹.

727
241 In the period immediately after liberation agriculture was slowly restarted, almost entirely by hand and in the most adverse conditions. Transport was highly disorganized and at the same time had to carry military traffic. On the heels of the victorious Soviet army the evacuated collective farmers were returning with their few animals to their wrecked farms. The flocks and herds were decimated or non-existent. Everywhere there were tremendous shortages of seeds, fertilizers, implements, machinery and manpower to do the work. In most districts in 1945 only 50 to 60 per cent. of the pre-war area could be sown. Many of the crops were sown late because of difficulty in cultivating the land; and when harvesting time came, much of the reaping and threshing had to be done by hand. Average yields of all crops were very low.

1 Department of UNRRA Supplies of the Ukrainian Government, Kiev, April 6, 1946.

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Nevertheless, the 1945 harvest - assisted by lend-lease supplies which were still then available, and (beginning in December 1945) by UNRRA relief deliveries - was furnishing the population a fair amount of cereals and bread. There was, however, very little meat from domestic sources, and only a small amount of fats and oils, as the following table shows.

TABLE XII

Ukraine: Production and Utilization of Fats and Oils, 1945.
(thousand metric tons)

727 433 258 262	Oilseeds	
	Production	
	Total production of oilseeds	496.4
	Deduction for seed	53.6
	Available for processing	442.8
	Utilization	
(388)	Total production of oil	105.8
	Deduction for industrial use (soap manufacture, etc.)	26.7
	Available for human consumption	
	by urban population	29.0
	by rural population	50.0
	Total	79.1
	Average consumption	Kilograms per person per year
	urban population	2.41
	rural population	1.86
	Average	1.98

433 As the table shows, the Ukrainian people received in 1945 only 4
262 to 5 kilograms of fats - 8 to 18 kilograms less than their pre-war
388 annual consumption rate.

Disaster in 1946

433 Early in 1946 other UNRRA supplies in addition to food began to
241 arrive - seeds, small quantities of fertilizers, and a few farm tools.
648 Throughout the Ukraine great efforts were being made for a successful
spring sowing. However, there were still shortages of seeds, ferti-
lizers, implements, and machinery. None of the 1,600 tractors
promised by UNRRA had arrived. Much of the work was still being done
by hand, especially where no draught animals were available.

[311] Even despite these drawbacks, it is estimated that about 80 per
cent. of the pre-war area was sown; but no figures are available on
the acreage planted to individual crops. In April 1946 the UNRRA
Mission, describing the difficulties in getting detailed agricultural
statistics, stated:

"...During a recent inspection trip we were informed by the
agricultural authorities of the Poltava oblast,¹ one of the best
agricultural regions in the Ukraine, that they did not even try
to set production goals for their collective farms this year
(1946); they simply told each farm to plant as much as possible
of whatever crops it could raise with the seed, equipment,
draught animals, and manpower available. (For example) We
believe that nobody really knows with any degree of accuracy
what acreage was planted to oil seeds in the Ukraine this year,
what yield may be expected, or how much of the resulting oil
will be available for non-farm use."

433 The Ukrainian people set high hopes on the 1946 harvest. However,
241 in the very summer when a good crop would have made all the difference,
648 the greatest drought since 1891 destroyed their prospects. It affect-
ed a vast area from Moldavia to the Urals, south to the Kuban and north
to Moscow. The earth was parched; and the crops, burnt by the hot
summer sun, had little to draw upon because rain and snowfall in the
winter of 1945-46 had been poor. Hopes withered with the wheat.
The potato crop too was affected: a hot wind out of Asia dried the
plants, and dwarfed the tubers.

1 Oblast: a district similar, for administrative purposes, to a county.

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231 During all this time the livestock of the Ukraine (see next
262 Section), was being slowly and laboriously built up by gifts from the
731 rest of the Union, by levies on Germany, and by natural increase.
Meat was very scarce, since no-one was willing to slaughter and further
deplete the slender herds. Cows, used for draught purposes, gave
little milk. Now added to these intense shortages of meat, fat and
dairy products was another great deficiency of cereals and bread,
hitherto the mainstay of the Ukrainian post-war diet.

U
241 The 1946 harvest cannot, at the most optimistic estimate, be
433 reckoned at more than 40 per cent. of 1940 in cereals and vegetables
231 per hectare sown. There is no fodder for the jealously guarded
animals; shelter for them is also very scarce since the people them-
selves are only now moving out of dugouts. If the animals are
slaughtered, the small supplies of dairy products and meat will soon
disappear; and the problem of draught power will remain as acute as
ever.

U
241 There is an agricultural dilemma in the Ukraine which a good
433 harvest would have gone far to break. Although extensive and con-
444 tinued demobilizations have been taking place, there is a great shortage
of labour on the farms.² If manpower is taken from the farms to help
produce the machinery necessary to liberate further men from the land,
there may not be enough farm workers left to produce sufficient food
for the factory workers. The poor harvest has aggravated this vicious
circle.

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[462] The Soviet Government has attempted in various ways to meet this
problem not only in the Ukraine, but throughout the Union. Everyone
who is able to work does so; young people, old people, women. The
women who worked during the war have remained part of the labour force
in both industry and agriculture, and an increasing number are being
recruited. In the Ukraine in 1946, women composed at least 60 - 70 per
cent. of the farm working force.

SU
[464] At the same time as steps are being taken to concentrate more
474 workers in agriculture, the organization of the collective farms is
447 being overhauled and geared to higher efficiency. To accomplish this,
the Soviet Council of Ministers created on September 19, 1946, a
Collective Farm Council, whose main tasks will be to elaborate measures
for the improvement of collective farming. This Council which is
authorized to call conferences of collective farm representatives when
necessary, was set up for the purpose of "establishing strict control
over the observation of collective farm statutes and for the solution
of questions of the collective farm structure." One of their primary

1 One must also bear in mind the reduced area under cultivation.

2 The war losses are felt very acutely.

The Five-Year Plan in Ukrainian Agriculture

185 According to the Five-Year Plan 1946-50 the crop area of the
 311 Ukrainian S.S.R. in 1950 is to reach 30.5 million hectares, of which
 474 21.3 million are to be planted on the collective farms. The dis-
 tribution of major crops is planned as follows.

TABLE XIIIUkraine: Crop Area in 1950 (Planned)
(hectares)

	Total area	Including on the collective farms
Grain crops	19,600,000	14,100,000
Industrial crops	2,600,000	2,200,000
Melons, potatoes, and other vegetables	2,800,000	1,000,000
Podder crops	5,400,000	4,000,000

Source: The Five-Year Plan, 1946-50

The area sown to sugar beet in 1950 is fixed at 830,000 hectares, and to sunflower, 801,000 hectares. The hopfields are to be rehabilitated, and the area of vineyards growing European varieties of grapes is to be expanded. Measures are to be taken to drain 40,000 hectares and irrigate 30,000 hectares of farm land; and all engineering work needed to ensure normal production is to be restored.

241 Average yields of Ukrainian crops in 1950 are envisaged as follows:
 43 grain, 1.42 tons per hectare (compare 1939 average 1.36); flax, 9.42
 185 tons; sugar beet, 19 tons; and potatoes, 11.2 tons per hectare.

In the entire Soviet Union in 1950 the grain harvest is planned at 127 million tons, of which the Ukraine is to produce 27.8 million tons, or more than one-fifth. The Ukraine's sugar beet harvest is fixed at 15.7 million tons, representing over 60 per cent. of the sugar beet harvest of the U.S.S.R. in 1950. The production of potatoes is expected to be 23 million tons.

The following table compares these targets with pre-war production.

1 Pravda Ukrainy, Kiev, August 28, 1946.

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TABLE XIV

185 Ukraine: Planned Production in 1950 Compared with 1940 and 1913 (see

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(million metric tons)

	1913	1940	1950
Grain	20	28	27.8
Sugar beet	8.9	14.8	15.7
Potatoes	about 5 ¹	21.5	23

1 According to the report in Pravda, the potato harvest in 1940 was "over 4 times" that of 1913.

Source: Pravda Ukraine, Kiev, August 28, 1946.

[728] Note: In comparing the 1950 target figures with pre-war production it is important to bear in mind the territorial revisions which occurred in the Ukraine after 1939, when she regained Western Ukraine and part of Bessarabia, lost a part of the Moldavian Autonomous Republic (which, together with the Moldavian Section of Bessarabia, then became a separate Union Republic), and added Northern Bukovina and Transcarpathian Ukraine.

[131] Thus the present area of the Ukraine exceeds its 1938 area by approximately 118,000 kilometres (11,800,000 hectares). However, we do not know precisely how much of this is agricultural land. The arable land in Western Ukraine before the war amounted to 4 million hectares; that of Transcarpathian Ukraine, to 239,000 hectares. In the parts of Bessarabia and Bukovina which were ceded to the Soviet Union, 3,285,800 hectares were classified as arable. If we roughly divide this between Moldavia and the Ukraine in proportion to the total ex-Rumanian area incorporated in each, about 1,300,000 hectares of agricultural land would have been added to the Ukraine in its share of Bessarabia; and the arable area of present-day Ukraine would exceed the 1937 cultivated area by about 5½ million hectares, the potential total being 30.6 million. The fact that the Five-Year Plan fixes the Ukraine's 1950 area of cultivation at 30.5 million hectares seems to support this assumption.

Livestock

231 In 1941 the number of livestock in the Ukraine was estimated at 30.4 million, including 10.5 million cattle and 4.6 million horses.¹

1 Statement on March 20, 1946, by Mr. Baranovsky, Ukrainian delegate to the UNRRA Fourth Council Session, published in the "UNRRA Journal", March 21, 1946.

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731 supplies had been shipped to the Ukraine; remaining "protocol" ship-
 433 ments to the Ukraine are expected to amount to 923 tons and 784,617
 648 dollars.

Included in these supplies are power stations, pumps, portable cranes, presses, electric locomotives, and electrical and telephone equipment.

Agricultural Supplies

731 The greater part of the tonnage in agricultural supplies consisted
 241 of seeds; by January 31, 1947, 15,669 gross long tons had been shipped.
 648 Most of these seeds had arrived in the spring of 1946; however, some of the bags were inadequately labelled, and the contents not easily identifiable. Because of this difficulty the seeds had to be given costly and time-consuming laboratory tests, which delayed distribution. At the same time, 2,600 tons of seeds were reported by the Ukrainian Government to be either diseased or infested with weeds, and therefore unfit for sowing. Negotiations are still in process for the replacement of these defective seeds by suitable types.

407 As at the end of 1946 the amount of farm machinery which had arrived was small. For example, the UNRRA programme calls for the delivery of 1,600 tractors to the Ukraine, but only 310 had been received by December 31, and these came too late for autumn ploughing. They are being distributed to state owned Machine Tractor Stations for use this spring.

UNRRA shipments have also included 6,692 tons of bagging, 2,090 tons of fishing equipment, and 244 tons of dairy equipment. These are shown in the following table, which summarizes agricultural rehabilitation shipments to the end of January.

TABLE XXIV

UNRRA Shipments to the Ukraine of Agricultural Supplies up to January 31, 1947

	Thousand U.S. dollars	Gross long tons
Bagging	1,672	6,692
Farm machinery	1,517	2,941
Fishing equipment	651	2,090
Food processing equipment	551	1,122
Repair material and hand tools		312
Seeds	9,861	15,669
Dairy and poultry equipment	151	244
Totals	14,403	29,070

Source : UNRRA Headquarters, Washington

-66-

291 In addition to these items, UNRRA has delivered several thousand
 731 tons of used clothing and footwear contributed through voluntary
 648 relief organizations in other countries. Most of the contributed
 supplies are distributed to war invalids or to orphans of the war.

The thousands of pairs of shoes delivered by UNRRA, as well as shoes made in the Ukraine from UNRRA leather, are sold according to a rationing system, with miners and heavy industry workers receiving highest priority. Textiles (also rationed) are sold as piece goods, or are made into garments in Ukrainian workshops for sale to permit holders. UNRRA blankets and comforters are distributed chiefly to hospitals and childrens' homes; and hides and other materials furnished by UNRRA are used in the construction of orthopaedic footwear or artificial limbs for wounded veterans.

Food Supplies

1731 When the UNRRA Mission first arrived in the Ukraine, no data
 241 were available on the republic's exact food situation. The 1945
 733 crops sown in a reduced area, under great difficulties of seed,
 262 fertilizer, and implement shortages, had yielded only a fraction of
 pre-war harvests. It was expected, however, that Ukrainian farms
 would produce enough grain to supply the population with bread and
 cereals until the 1946-47 harvest. UNRRA food supplies were there-
 fore calculated to provide chiefly meats, fats (or equivalents in the
 form of army rations), and dairy products.

731 Altogether, UNRRA planned to use 100 million dollars of the
 262 Ukrainian budget for food. By the end of January 1947, all but
 648 5 1/2 million dollars of this had been shipped, as is shown in the
 following table.

TABLE XXVI

UNRRA Food Shipments to the Ukraine up to January 31, 1947

	Thousand U.S. dollars	Gross long tons
Grain and grain products	548	3,836
Meat and meat products	30,682	54,245
Fish	4,166	23,240
Dairy products	13,378	33,134
Fats, oils, soap	12,725	41,885
Pulses	615	4,658
Beverages	1,490	3,437
Soup- dehydrated	2,835	9,392
Quartermaster food	27,134	109,055
Other food	206	548
U.S. Dept. of Agriculture surpluses	678	3,629
Totals	94,587	287,519

Source : UNRRA Headquarters, Washington.

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731 Most of the UNRRA food supplies delivered to the Ukraine are
 262 distributed to ration stores for sale to workers and their dependants.
 443 A large proportion (about 35 per cent.) also goes for communal feeding
 265 through dining rooms, health resorts, homes for invalids and the aged,
 and dining halls of trade schools. Hospitals, childrens' homes,
 maternity homes, and the like also receive a share (around 10 per cent.)
 (The food distributed to welfare organizations is delivered free of
 charge).

731 Apart from the food which UNRRA supplies, the Ukrainian people
 262 are dependent on whatever amounts of local produce may appear on
 various markets. According to the rationing system, the farmers are
 431 allowed to retain part of their produce to feed themselves and their
 dependants, and the farm's livestock; the state then purchases a
 certain quota for use in feeding the non-farm population. If any
 surplus then remains, the farmers may keep it, or sell it on the free
 market at uncontrolled prices.

241 In practice, however, because of the extremely poor harvests in
 433 the last two years, Ukrainian farmers have scarcely been able to feed
 434 even themselves; and the amounts of domestically produced food which
 reach the ration stores or the free market have consequently been
 small.

The following section describes the sources of food supply open to
 the urban consumers.

The System of Food Distribution

443 In the cities of the Ukraine there are three outlets through which
 434 foodstuffs reach the population:

- 364 (a) the ration stores, where the bulk of foodstuffs are sold
 262 at fixed prices to ration-coupon holders;
- (b) the so-called gastrons (commercial stores) where scarce,
 luxury items are sold; and
- (c) the public markets, where collective farmers and peasants
 bring their surplus produce for sale.

Most of the rural areas and villages of the Ukraine are expected
 to produce locally enough food to feed the inhabitants; and as they
 are nearly all considered to be self-supplying, they receive through
 the central distribution system only sugar and sometimes bread.
 Their surplus farm produce (that is, food in excess of that needed
 for feeding people or livestock on the farm and not subject to
 collection or purchase by the state) is usually brought by the
 farmers to the public markets for sale to the urban population.

[435] the quantities of produce and the variety of items available in the
 free public markets vary greatly from season to season and from
 day to day; Prices are equally variable.

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262 (a) In the districts most affected by the poor crops of 1946, all children are to be fed by state feeding centres under the control of the Ministry of Health. (Normally, the Ministry of Education is in charge of feeding some of the school children; and other groups are fed in varying degrees by the Ministry of Health and trade union organizations.) However, it is hoped that now by establishing all child feeding arrangements under one Ministry, children of all ages and population groups will be fed as well as is possible. Transport is one of the limiting factors of this programme.

(b) Measures are being taken to recruit and equip special medical teams for use in areas where any widespread symptoms of starvation appear. These teams will attempt to ensure that the best possible use is made of such palliative measures (for example, special protein foods) as are available.

SUMMARY

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727 The Ukraine has often been called the granary of the Soviet Union. Before the war it produced all the food required for its own population; it helped to feed other regions of the U.S.S.R.; and it produced nine-tenths of the grain exported from the Soviet Union.

This favourable position was abruptly reversed by the war, which left the Ukraine, after Byelorussia, the most devastated section of Europe. In August 1945 when this Republic applied to UNRRA for relief assistance, the most urgently needed supplies were food.

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262 UNRRA's major contribution to recovery in the Ukrainian Republic has been in furnishing 100 million dollars' worth of food - a considerable amount, but very small in relation to the need. Distributed among the urban population of about 27 million, the per capita proportion is almost insignificant. However, the foods delivered by UNRRA were those in shortest supply and those most necessary to sustain the people.

Since the disastrous drought, the amount of food available from domestic production is exceedingly small. Not even the very low bread ration is assured. Moreover, UNRRA relief is drawing to a close; and food shipments since January 1 have been negligible. The mission in Kiev reports: "The cessation of relief supplies of meats, fish, milk, and fats at this time is nothing less than a tragedy."

There is no immediate prospect of improvement in the Ukrainian food situation. Other areas of the Soviet Union, having been similarly affected by the drought, are not in a position to give assistance.

24: Cech and Mellon S-2 (no date) 1944 Ukrainians-
Ruthenians



Shepherds blow huge horns to round up their sheep by night

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In the narrow valleys and on their slopes are cottages and straggling villages where the Ruthenian uplanders live. Nearly, all the huts are made of wood and are flanked by gardens with patches of sunflowers. In the higher altitudes the land consists mainly of meadows, and such meagre fields as there are yield scanty crops of oats, potatoes or hemp—not sufficient to live on. No wonder that during the summer months it is chiefly women and children who can be found at home; the menfolk either fell trees in the forest or earn their living as seasonal labourers in the towns and villages of the more prosperous South.

101 These lonely mountains and forests breed a people with a distinct
162 character of their own. Living as they do in seclusion, they not only
differ from their Slovak neighbours but show distinct regional differences

24: Cech and Mellon S-2 (no date) 1944 Ukrainians
Ruthenians

CZECHOSLOVAKIA

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531 Mountainous Ruthenia is a country of traditional costumes. The beautiful embroideries which decorate them and their colour-effects testify to the innate artistic sense of the people. Their patterns and hues vary not only from tribe to tribe but also from village to village. Blue, brown and red are their favourite colours, but one may say that practically all the colours are represented. On weekdays their attire is rather simple. But on Sundays and festivals the space in front of the wooden church is a veritable kaleidoscope of well-blended hues. Particularly striking is the garb of the Huculs whose artistic talent also shows in their elaborate wood-carvings and in their love of music.

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574 Life is hard in the mountains and forests of Carpathian Ruthenia. Yet the small farmers, wood-cutters, labourers and shepherds who live there are a friendly and hospitable race. The traditional rule that a stranger who comes into a Ruthenian cottage is to be hospitably received has found a remarkable illustration in recent times. The inhabitants of one village in the South have decided that the passengers on the bus which passes through the village once a day have to be treated as guests. And so whenever the bus arrives a peasant woman with a basket full of fruit or cheese or buns is waiting at the stop to share out her eatables among the travellers.

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241 In the southern part of the country life and people are different. Here one comes across fields of maize, wheat and tobacco, while on the sunny hills bordering on the fertile plain further south there are rich vineyards. But most of this good soil is not the property of the Ruthenians; they have been pushed into the mountains by the Hungarians who owe much of the land and employ the native Ruthenians as seasonal labourers. In this part of the country the population is mixed, and the Ruthenians who live here have surrendered much of their racial individuality as well as the traditional costumes. No wonder that those uplanders who moved south for economic reasons long to return to their poor but proud mountains.

369 Carpathian Ruthenia is a rural country. Even its largest towns, such as Mukačevo with a State tobacco factory and other works, 655 Berehovo, the centre of the Ruthenian wine trade, Sevljuš with excellent 438 vineyards, are essentially provincial in character.

361 The largest town, Užhorod, has assumed the character of a modern city since it became the capital of Carpathian Ruthenia during the twenty years of the Czechoslovak Republic. The government built here imposing public buildings as well as large blocks of up-to-date residential flats for its civil servants. Prominent among these representative buildings is Zemský Úrad housing the headquarters of the administration of Carpathian Ruthenia; its façade is strictly modern and its interior, particularly the Parliament Chamber and the large Reception Hall, is beautifully equipped.

This part of Užhorod is well laid out; right along the river bank

GENERAL SURVEY

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in agriculture (fertilizers) and in other branches of the economy. There are several superphosphate plants on the right bank, a large soda industry in the Artemovsk-Lisichansk area in the north of the Donets Basin, based on local salt deposits, chemical plants tied closely to the coking and the metallurgical establishments, and sulphuric acid and fertilizer plants connected with the metallurgy of zinc.

In addition to zinc, which is imported into the Donets Basin, non-ferrous metallurgy includes that of aluminum, which is also imported and worked at Zaporozh'ye on the basis of Dneproges power, and of mercury, mined near Nikitovka in the Donbas.

The petroleum and natural-gas industry is of only local importance and is intended to supply the Ukraine with its gas and liquid fuel needs. The oil fields lie in the foothills of the Carpathians, near Borislav and Drogobych. During the current Plan, a natural gas pipe line was laid from Dashava (in the oil fields) to Kiev. The Ukraine also imports petroleum from Baku via the ports of Osipenko and Odessa, and the station of Trudovaya (Donbas) is the terminus of a kerosene pipe line from the Grozny fields.

The textile industry (wool, cotton, and linen milling) supplies only local needs. The food industry, on the other hand, is of national importance. This is true especially of the sugar-refining industry, located mainly in the Vinnitsa and Kiev oblasts, on the right bank, and in the Poltava and Kiev oblasts, on the left bank.

The agriculture of the Ukrainian SSR, less important than heavy industry with respect to the value of production, occupies, nonetheless, a major position in the economy of the USSR. Arable land occupies 60 percent of the total area. Prior to the Second World War the Ukraine was one of the regions best equipped with machine-tractor stations and agricultural machinery. Among the cereals, winter wheat in the west, spring wheat in the east, and barley are most important. The sugar beet is by far the major industrial crop; sunflower, cotton, and tobacco are grown to a lesser extent. Orchard farming is popular and produces melons and pumpkins, garden fruits (apples, pears, plums, and cherries), and in the south, apricots and grapes. Horses, cattle, and pigs are raised throughout the region.

The right-bank Poles'ye is least developed agriculturally. Marshes and forests occupy most of the area. In the isolated patches of moist arable land, potatoes, buckwheat, flax, and hemp are the chief crops. The area abounds, however, in pasture land, and dairy farming is

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UKRAINIAN SSR

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311 strongly developed. In the left-bank Poles'ye, land has long been culti-
241 vated and drained. There are occasional marshy and forested sections,
U mainly between the Dnieper and the Desna. The chief crops are hemp,
311 tobacco, buckwheat, and leguminous plants. Orchard farming is im-
241 portant. The right-bank wooded steppe is the principal agricultural
region of the Ukraine. It combines fertile black earth with a warm and
moist climate, and the ready availability of phosphate fertilizer. The
sugar beet is predominant and closely linked with the sugar industry.
Among the cereals, rye, winter wheat, and oats are most important;
potatoes and leguminous crops are also grown. The by-products of sugar
refining and fodder crops support large livestock herds raised for dairy
products and meat. The growing of fruit is of national importance.
Vineyards lie in protected valleys near the Dniester River. The left-bank
wooded steppe grows crops similar to those of the right bank. Sugar
beets decrease toward the east and are gradually replaced by sunflowers.
Similarly, winter wheat gradually makes way for spring wheat. In the
southern steppes, where a drier climate prevails, wheat is the most im-
portant crop. Rye, corn, and barley are also grown, the latter mainly
in the very dry districts. Along the Sea of Azov and westward to the
lower Dnieper cotton has been introduced in recent years and is grown
without irrigation. Ukrainian cotton is of rather poor quality and pro-
duces little fiber. Melons are grown to a great extent, and there are vine-
yards along the Sea of Azov coast and around Odessa. In the Carpathian
realm, the northern foothills abound in wheat and sugar beets. Up-slope
dairy farming is important. Agriculture is poorly developed in the
Transcarpathian Ukraine. Large areas are covered by forests and pas-
ture land. In the vicinity of the large metropolitan centers, such as Kiev,
Khar'kov, L'vov, as well as in the densely inhabited sections of the
Donbas, around Krivoy Rog, and along the Dnieper, truck produce and
dairy farming are most important.

54 496
496 U The intensely developed economy of the Ukraine requires a corre-
spondingly well-developed transportation network. In view of the shal-
lowness of most of the Ukrainian rivers, the railroads bear most of the
load. The Ukraine has the densest rail network of the USSR, the chief
centers being at L'vov, Kiev, and Khar'kov. Among recently completed
54 lines and spurs, the direct Donbas-Moscow trunk is of the greatest
54 significance. Only since 1932, when the construction of the Dneproges
504 dam was completed and an artificial lake was created at the site of the
rapids (a former obstacle to navigation), has the Dnieper become the

THE RIGHT-BANK WOODED STEPPE

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major navigable through-route of the Ukraine. The major ports are Zhdanov and Osipenko on the Sea of Azov, and Kherson, Nikolayev, and Odessa on the Black Sea. Odessa is one of the major maritime trade centers of the USSR.

The Ukraine exports coal, iron and steel, grain, salt, and sugar, and imports cloth from Moscow and Ivanovo, precision tools from Moscow and Leningrad, lumber from Gor'kiy Oblast, along the Volga, or from the Belorussian SSR along the Dnieper, petroleum products from Groznyy (by rail and pipe line) and from Baku (by sea via Batumi-Odessa), and fish from the Lower Volga.

OBLAST SURVEY

THE TWENTY-FIVE OBLASTS of the Ukrainian SSR can be grouped into seven geographic regions on the basis of physical, economic, and historical factors: the right-bank and the left-bank sections of the wooded steppe, the Donets Basin, the Dnieper bend, the Black Sea lowland, the Ukrainian Poles'ye, and the Western Ukraine.

THE RIGHT-BANK WOODED STEPPE

THE RIGHT-BANK WOODED STEPPE, which is the original settlement area of the Ukrainian people, includes the oblasts of Kamenets-Podol'skiy, Vinnitsa, and Kiev. Its fertile black-earth soils and the warm, humid climate have combined to turn the area into a region of intensive agriculture, a dense population, and a well-developed rail network. Sugar beets are the leading crop. Through careful tilling of the soil, the application of phosphate fertilizer, and the rotation with grains and forage grasses, high yields are obtained which furnish up to three tons of sugar per 2.5 acres. The principal grains are winter wheat, rye, barley, and oats. Leguminous crops (peas, lentils, beans) are extensively grown to restore soil fertility. In connection with the intensive crop cultivation, the raising of hogs and cattle for meat and milk production is also very important. Forage grasses and the by-products of the sugar-refining and associated distilling industries constitute an excellent feed supply. connected with the sugar economy of the area are the lignite and peat industries, which fuel the processing plants, the quarrying of limestone (used in the sugar-bleaching process), and the mining of phosphorite, which is converted into fertilizer.

Kiev Oblast

Area, 15,900, population, 3,500,000

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Kiev Oblast lies in the Dnieper lowland (in the north) and in the Volyn'-Podolian upland (in the south). It is drained by the Dnieper and its right affluents, the Teterev and the Ros' rivers. In the northern section, which penetrates into the forested Poles'ye, the growing of flax, potatoes, and buckwheat are important. The rest of the oblast falls within the sugar economy. Truck produce in the Kiev metropolitan area and orchards in the south, near Uman', and the southeast, near Smela, are important. Peat is worked mainly northwest of Kiev and near Smela, while lignite comes from Yurkovka near Zvenigorodka. Sugar mills abound throughout the center and the south; flour milling and distilling are other rural industries.

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Kiev, the capital of the Ukrainian SSR since 1934, was the third largest city of the USSR on the eve of the Second World War. Situated on the middle course of the Dnieper River, below the mouths of its two large affluents, the Pripet and the Desna, Kiev occupies a central location at the junction of the river, four rail trunk lines, and many highways. An ancient city and until the middle 13th century the capital of Kievan Russia, Kiev is the site of many historical relics and monuments. An early commercial and food-processing center, it developed into an industrial point of first rank under the Soviet regime. Its heavy industries produce machine tools, machines, motors, aircraft parts, boilers, agricultural implements, motorcycles, and bicycles, as well as equipment for chemical, sugar, and tanning industries. There are electrical (radios and telephones), textile, and food industries. A number of major enterprises, including lumber mills, a meat-packing plant, a rubber-goods factory, and railway-car works are located in the left-bank industrial suburb of Darnitsa. Shipyards produce vessels for the Dnieper River traffic. A natural-gas pipe line for industrial and domestic use was laid in the post-war period from Dashava.

Other major industrial centers of the oblast are Belaya Tserkov', south of Kiev, Uman' in the far south, and Smela and Cherkassy on the Dnieper in the southeast. They are primarily food-processing centers, with sugar and flour mills and metal, clothing, and leather industries.

THE LEFT-BANK WOODED STEPPE

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Vinnitsa Oblast

Area, 10,600, population, 2,300,000

Vinnitsa Oblast lies in the Volyn'-Podolian upland, bounded in the south-west by the Dniester River and drained by the Southern Bug River. In addition to the basic sugar-beet and wheat crops, fruits, tobacco, and corn are raised near the Dniester River. Viticulture is possible in the deep, protected valleys of the southwest. The oblast is one of the foremost sugar producers of the Ukraine.

Vinnitsa, on the Southern Bug, has an industry closely connected with the agricultural economy. It processes the local products (sugar, flour, meat, alcohol) and has machine repair shops and a superphosphate plant.

Mogilev-Podol'skiy, on the Dniester in the south, has food-canning, lumber, and metalworking industries.

Kamenets-Podol'skiy Oblast

Area, 8,000, population, 1,800,000

Kamenets-Podol'skiy Oblast is also located in the Volyn'-Podolian upland, north of the Dniester River. It lies at the western end of the sugar region and also engages in the raising of fruits, tobacco, and corn near the Dniester River. Phosphorite and peat deposits are worked. In the northern forest belt, lumbering, paper milling, and ceramics are the chief occupations.

Proskurov, the capital, is a rail center on the upper Southern Bug River. It has food industries (flour milling and sugar refining), machine shops, and clothing and furniture plants.

Other industrial points are Kamenets-Podol'skiy near the Dniester, with fruit canneries, meat-packing and clothing industries, and Shepetovka, a rail center in the forest area, with sawmills, and meat-packing and railroad shops.

THE LEFT-BANK WOODED STEPPE

THE LEFT-BANK WOODED STEPPE includes the oblasts of Poltava, Sumy, and Khar'kov and represents a transition region between the right-bank Ukraine in the west and the Central Black-Earth Region of the Russian SFSR in the east. Although sugar beets continue to form a major crop, the emphasis is placed to a greater extent on grain crops, among which winter and spring wheat are most important. Potatoes and

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UKRAINIAN SSR

133* tobacco, in the north, and sunflowers and melons, in the south, are also
241 raised. Hog raising forms the basis of a major meat-packing industry.
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133 Machinery industries are located chiefly in Khar'kov.

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Khar'kov Oblast

Area, 12,000, population, 2,500,000

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133* Khar'kov Oblast lies in the southwestern outspurs of the Central Rus-
241 sian upland and is drained by the Northern Donets and the upper Oreł'
438* and the lower Oskol rivers. Sugar beets predominate in the north, wheat
U and sunflowers in the south, and truck produce and orchards in the
133 Khar'kov metropolitan area. Rural industry is based chiefly on the
241 processing of the agricultural products and engages in sugar refining,
438 flour milling, sunflower-oil extraction, distilling, and dairying. The
oblast possesses a good rail network on the route from the Donets Basin
to Moscow.

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438* Khar'kov, the capital of the Ukraine until 1934, is its second city and
U its foremost machine-construction center. Situated at the junction of
438 six rail lines at the gates to the Donets Basin and Krivoy Rog industrial
areas, it dates from the seventeenth century and developed rapidly after
the industrialization of the southern Ukraine in the late nineteenth
century. Its impressive array of products includes tractors, turbine
generators, coal-mining and oil-drilling equipment, electrical goods,
diesel motors, ball bearings, machine tools, harvester combines, loco-
motives, and bicycles. It also has light and food industries.

Izyum, on the Northern Donets, southeast of Khar'kov, has metal-
working, ceramic, and sawmilling industries.

Kupyansk, a major rail center east of Khar'kov, engages in ma-
chine construction, metalworking, and lumber and sugar milling.

Poltava Oblast

Area, 13,200, population, 2,200,000

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133* Poltava Oblast, in the Dnieper lowland, is bounded on the southwest by
241 the Dnieper River and drained by its left affluents, the Sula, the Psel,
U and the Vorakla. It grows chiefly sugar beets and wheat, as well as other
133 grains, hemp, mint, sunflowers, and corn. Sugar refining and flour mill-
241 ing are the main rural industries.

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438* Poltava, a four-way rail junction on the Vorskla River, is a processing
U center for a rich sugar and wheat region. It has locomotive repair shops,
438 flour mills, meat-packing plants, and oil presses. Just northeast is the

DONETS BASIN

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site of the battle of Poltava (1709), which marked the decisive defeat of the Swedes under Charles XII by Peter the Great. 438*

Kremenchug, a lumber- and grain-trading point on the Dnieper, has light and food industries and produces road-construction machines. Its right-bank suburb, Kryukov, has large railway-car works. 438*

Sumy Oblast

Area, 9,400, population, 1,700,000

Sumy Oblast, lies in the western outliers of the Central Russian upland and is drained by the upper Vorskla, the Psel, the Sula, and the Seym rivers. Basic crop combinations are sugar beets and wheat in the south, and hemp and wheat in the north. Also grown in the north are potatoes and buckwheat; in the south, tobacco and mint. Sugar refining, flour milling, and hemp retting are the chief industries. An oil field is under development near Romny. 54
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Sumy is a sugar-refining center on the Psel River; it produces also agricultural machines, chemical fertilizer, and woollens. 438*

Other industrial cities are Konotop, a rail junction with machine shops and food industries, and Shostka, which produces chemicals and photographic film. 438*

DONETS BASIN

THE DONETS BASIN, which includes the oblasts of Voroshilovgrad and Stalino, is the most heavily industrialized section of the Ukraine and one of the principal industrial bases of the USSR. The impressive industrial development of the district is the result of the combination of local coal production and the iron-ore imports from the Krivoy Rog area, which forms the basis of the large-scale metallurgical industry. Nearly all the major mills concentrated in the Donbas pass through a full cycle of metallurgical production; they had a prewar capacity of 6 million tons of pig iron, 5½ million tons of ingot steel, and 3 million tons of rolled metal. The coking process, which is essential for the iron and steel industry, also feeds the basic chemical industries producing nitrate fertilizer and other chemicals. The use of iron and steel products in the heavy-machine industry completes the industrial scheme of the region. Associated with these principal activities are the quarrying of building and flux materials (dolomite, limestone, refractory clays, and cement rock), the mining of salt, mercury, and lead-zinc ores, as well as large 54
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DNIEPER BEND

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either at the sources of raw materials (Krivoy Rog, Nikopol') or on the Dnieper River (Dneprodzerzhinsk, Dnepropetrovsk, and Zaporozh'ye). Agricultural production emphasizes wheat, barley, sunflowers, southern hemp, and soy beans. On the basis of the local grain production and grain brought along the Dnieper, a large flour-milling industry has developed.

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Dnepropetrovsk Oblast

Area, 12,600, population, 2,200,000

Dnepropetrovsk Oblast extends from the Dnieper Bend to the Donets Basin and is divided into two equal sections by the course of the Dnieper River. Grains and sunflowers are the basic crops, with some hemp in the northeast and cotton in the southwest. The major rural industries are flour milling, meat packing, and dairying.

Dnepropetrovsk, on the Dnieper River, is a major industrial and transportation center formerly called Yekaterinoslav. It has large metallurgical works, pipe rolling mills, rail and sheet-metal mills, and steel-construction works. An automobile plant is to be established during the post-war Five-Year Plan. The city has clothing, leather, and food industries and is an important lumber-trade center.

Dneprodzerzhinsk, on the Dnieper, west of Dnepropetrovsk, has metallurgical and chemical works, producing rolled steel products, coke, and nitrate fertilizer, plastics, and cement. Metal construction and railway-car building are other important activities.

Krivoy Rog, the center of a rich iron-ore region, distinguished by reserves of more than one million tons and a high metal content (70 percent), has metallurgical works and iron foundries.

Nikopol', the center of one of the main manganese areas of the USSR, has concentrating plants, shipyards, and one of the largest pipe-rolling mills of the Union. The manganese mining areas lie northeast of Nikopol' in the district of Marganets [manganese] and in the northwest, near Ordzhonikidze.

Lesser industrial centers are Novo-Moskovsk, with sheet-metal mills, and Pavlograd, a pulp-milling and furniture city.

Zaporozh'ye Oblast

Area, 10,400, population, 1,300,000

Zaporozh'ye Oblast extends from the Dnieper River to the Sea of Azov. Agricultural emphasis is on wheat in the north and on cotton

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241 in the southern flat steppes. Other crops include castor beans, vineyards
U (near Osipenko), and fruits near Melitopol' and Kamenka-
● 241 Dneprovskaya.

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376 Zaporozh'ye (the former Aleksandrovsk) is a major industrial and
U hydroelectric-power center, the site of the Dnieper dam and power
376 station (*Dneproges*). This largest water-power producer of Europe
has a capacity of 550,000 kilowatts. Completed in 1932, the dam was
blown up in 1941 by the retreating Russians in accordance with their
scorched-earth policy. Reconstruction began shortly after its recapture
in 1943, and in 1947 the first turbine went into operation. The power
54 generated by *Dneproges* furnished the basis for the industrial develop-
438* ment of Zaporozh'ye, supplying its new special steel works, aluminum,
U and magnesium plants. It produces harvester combines and chemicals.
438 Melitopol', an agricultural center in the southern steppe, has ma-
chine shops, producing diesel motors, grain-elevator equipment, and
pumps. In addition to chemical and furniture industries, it also has flour
mills, meat-packing plants, and cottonseed-oil presses.

Osipenko, until 1940 called Berdyansk, is an important port on the
Sea of Azov. It has agricultural machinery works, an aircraft plant,
shipyards, and railroad repair shops. Near by is a health and beach
resort.

THE BLACK SEA LOWLAND

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241 THE BLACK SEA LOWLAND, with its dry level steppes, includes the
U oblasts of Odessa, Nikolayev, Kherson, the southern part of Zapo-
241 rozh'ye, as well as Kirovograd and Izmail. This area which was annexed
by the Russian Empire only in the eighteenth century, is a region of
relatively recent settlement. Only toward the end of the last century
did extensive grain growing replace the previously predominant pastoral
economy, and the region developed into the main grain producer of the
Ukraine. In the Soviet period a vast cotton area was introduced in the
lower Dnieper area and cultivated by dry-farming methods in rotation
with fodder crops. Elsewhere sunflowers, soy beans, fruits, melons, and
vineyards became important. The local industry is closely connected
with the agricultural production and engages in processing and machine
manufacturing. Shipbuilding is centered in the large coastal cities.

BLACK SEA LOWLAND

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Kherson Oblast

Area, 10,600, population, 700,000

Kherson Oblast extends north of the Crimea from the Sea of Azov to the Black Sea. It is a typical flat, dry steppe, with cotton and wheat growing. Kakhovka, on the Dnieper River below Zaporozh'ye, is the site of the second great Dnieper dam, scheduled for 1951-57, with irrigation canals reaching into the Crimea. Skadovsk and Khorly, on the Black Sea, and Genichesk, on the Sea of Azov, are minor fishing ports.

Kherson is a major port at the mouth of the Dnieper River, where there are shipyards, repair docks, agricultural machinery works, and extensive food-canning industries. It is the terminus of a new railroad built during the Second World War from the Crimea.

Nikolayev Oblast

Area, 7,500, population, 800,000

Nikolayev Oblast lies on the Black Sea and is drained by the lower Southern Bug and the Ingul rivers. Cotton and wheat are the chief crops, with castor beans and sunflowers in the north, truck produce near Nikolayev, and dairy farming. In the rural areas flour milling, dairying, and sugar refining are the main industries.

Nikolayev lies at the head of the Bug Liman, over forty miles from the Black Sea. It is a major shipbuilding center and exports grain, sugar, iron, and manganese ore. It produces agricultural machines and has textile, food, and fish-canning industries.

Odessa Oblast

Area, 10,800, population, 1,800,000

Odessa Oblast lies in the western section of the Black Sea lowland and extends from the Black Sea to the Volyn'-Podolian upland in the north. It is bounded in the west by the Moldavian SSR. Numerous minor intermittent streams drain it in the south, and the Southern Bug in the north. Sugar beets are the main crop in the north, wheat and sunflowers in the center, and cotton in the south. Of lesser importance are corn, fruits, and castor beans. Sugar refining, flour milling, dairying, and wine making are the chief rural industries.

Odessa, the third city of the Ukraine and one of the major ports of the USSR, exports lumber and grains, and imports oil from the Caucasus, coal from the Donbas, cement from Novorossiysk, for local in-

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industries and for transshipment to the right-bank Ukraine, Belorussia, and as far as Leningrad. Its industries include machinery works, which produce agricultural implements, machine tools, grain-elevator and food-industry equipment, cranes, and printing machinery. Its food industries process mainly sugar, flour, and canned goods. There are clothing and shoe factories, chemicals plants (superphosphate, iodine, linoleum, petroleum refining), woodworking and jute industries. The city has shipyards and railroad shops; during the post-war Plan, an automobile assembly plant will go into operation. Situated on the picturesque hillside, Odessa descends in several terraces, including a famous stairway, to the sea. Northward and southward along the coast are well-known health resorts (Khadzhibey Liman, Kugal'nik Liman Arkadiya, and Fontan) with mineral springs and mud baths. Regular overseas connections are maintained from the port.

Pervomaysk (formerly Ol'viopol') is situated on the Southern Bug and produces agricultural machines, flour, and meat.

Kirovograd Oblast

Area, 9,600, population, 1,100,000

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Kirovograd Oblast lies somewhat north of the level steppe in the Volyn'-Podolian upland. It is bounded on the northeast by the Dnieper River and drained by the Ingul and Ingulets rivers. Wheat is the basic crop; sugar beets are grown in the northwest and the east, sunflowers in the south, and potatoes and flax in the moist, wooded region of the north. There are deposits of lignite, kaolin, refractory clays, and granite. Sugar refining, flour milling, and dairying are the main rural industries. Kirovograd was originally called Yelizavetgrad. In 1924 it was renamed Zinov'yevsk, then Kirovo in 1936, and Kirovograd in 1939. It lies on the upper Ingul River in a lignite-mining region and has important agricultural machine works and food-processing plants.

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Znamenka is a rail center which has metalworking and food industries.

Aleksandriya, which has tanneries and flour mills, is also developing into the main lignite-mining center of the right-bank Ukraine.

Izmail Oblast

Area, 4,800, population, 700,000

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Izmail Oblast was formed in 1940 out of the southernmost part of Bessarabia which had a predominant Ukrainian and Russian popula-

POLES'YE

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tion. It lies between the Dniester River and the Kiliya arm of the Danube delta and has Moldavian minorities in the northwest and Bulgarian elements in the west, near Bolgrad. The main crops are wheat, barley, and corn in the northwest, where sheep are also extensively raised. Near the Black Sea there are large vineyards and orchards. The oblast is one of the most important wine-producing districts of the USSR. Along the coast there are fisheries and saltworks. Building materials constitute the only mineral resources.

Izmail (Rumanian *Ismail*) is a port and a fishing center on the Kiliya arm of the Danube delta. It produces caviar and has an active grain and lumber trade.

Kiliya (Rumanian *Chilia Nouă*) is a fishing port on the Danube delta, east of Izmail.

Belgorod-Dnestrovskiy (Rumanian *Cetatea Albă*) was known as Akkerman until 1944. It is a port on the Dniester Liman, trading in wine, fish, and wool. It has fisheries and saltworks and is surrounded by vineyards and orchards.

POLES'YE

THE UKRAINIAN POLES'YE, which includes the oblasts of Zhitomir and Chernigov and the northern sections of Kiev and Sumy oblasts, is distinguished by a relatively high humidity, wooded terrain (especially in the west), and podsolich soils, similar to its Belorussian counterpart, which adjoins it in the north. Among the sparsely settled population, industries are poorly developed. Intensive crops are grown in the forest clearings, including flax, hemp, potatoes, and forage crops, which support some dairy-cattle herds. In the south, along the border of the wooded steppe zone, sugar beets and tobacco are cultivated. The Poles'ye is the only Ukrainian region (not counting the western oblasts, which have not been long exposed to the Soviet planned economy) where rye acreage exceeds that of wheat. Buckwheat is also grown as a local food staple. Industry is largely based on agricultural and lumber resources. Among the food industries, starch processing and distilling are the chief activities. There are woodworking and furniture plants, porcelain works, tanneries, and hemp and flax retting installations. Among the mineral resources, one should note granite, sandstone, used in the making of refractory bricks, and labradorite. Peat extraction is important as a fuel basis.

Zhitomir Oblast

Area, 11,600, population, 1,800,000

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Zhitomir Oblast lies on the northern edge of the Volyn'-Podolian upland and extends northward into the Poles'ye. Sugar beets and wheat penetrate into the southern section, but in the remainder, potatoes, flax, buckwheat, and hops are grown. The forested area in the north yields lumber, clays, kaolin, and granite, and quartzite and has ceramic and paper-milling industries. In the southern rural areas sugar refining, distilling, and flour milling are the main industries.

Zhitomir, on the Teterev River, is a rail center, with lumber and grain trade. It has large furniture factories.

Berdichev, an active trading center, has important sugar and leather industries and clothing and dyeing plants, and flour and tobacco products are produced there.

Korosten', a rail junction in the northern part of the oblast, has various chemical plants, glass and porcelain works, and lumber and paper mills.

Novograd-Volynskiy, in the southwest, has machine shops and distilling and furniture industries.

Chernigov Oblast

Area, 12,200, population, 1,700,000

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Chernigov Oblast is bounded on the west by the Dnieper and is drained by its chief left affluent, the Desna River. In addition to the basic rye, oats, and buckwheat crops, hemp and flax are grown in the north, potatoes in the center, and sugar beets, tobacco, and mint in the southeast. Lumbering is carried on in the wooded areas of the north and the west, and peat cutting in the marshy river valleys. Sugar refining, flour milling, meat packing, and flax and hemp retting are the main rural industries.

Chernigov, on the right bank of the Desna River, is one of the oldest cities of the Ukraine, having lumber and food-processing industries (canned goods, alcohol, and flour) and chemical works.

Nezhin is an agricultural center in a grain, potato, and sugar-beet district, while Priluki, the other industrial center of the oblast, processes sugar, tobacco, and flour and engages in the manufacture of clothing, leather goods, and furniture.

WESTERN UKRAINE

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WESTERN UKRAINE

THE WESTERN UKRAINE includes those areas (except for Izmail Oblast) which were incorporated into the Ukrainian SSR after 1939 and later. Six oblasts (Rovno, Volyn', Ternopol', L'vov, Stanislav, and Drogo- bych) were annexed in the autumn of 1939 following the partition of Poland and the Soviet occupation of its eastern section. Chernovtsy Oblast was formed in the Northern Bukovina and the extreme northern section of Bessarabia after the acquisition of these territories from Rumania, in the summer of 1940. The Transcarpathian Oblast was ceded to the Ukraine according to an agreement with Czechoslovakia in 1945. The Western Ukraine can be roughly considered in four geographical sections: the Carpathian section in the south, on the slopes and in the foothills of the Carpathian Mountains, the Poles'ye, a northern lowland along the right affluents of the Pripet River, the hilly central section in the Volyn'-Podolian upland, and the Transcarpathian section.

The Carpathian section of the Western Ukraine includes the oblasts of Chernovtsy, Stanislav, and Drogo- bych. Its economy is based essentially on the mineral resources of the area: petroleum, natural gas, salt, and potash, and on the lumber resources on the slopes. There are a number of health resorts in the valleys.

Chernovtsy Oblast

Area, 3,200, population, 900,000

Chernovtsy Oblast lies along the upper Prut and the Dniester rivers. The forests (mainly beech), building materials, salt, and petroleum are found in the higher foothills. Agriculture puts the emphasis on grains (wheat, corn, and barley), potatoes and sugar beets in the south and on fruit growing along the Dniester, in the northeast. Sheep raising and lumbering are the main activities in the mountains. Sawmilling, wood- working, sugar refining, flour milling, and wine making are the chief rural industries.

Chernovtsy (Rumanian *Cernăuți*) called Chernovitsy until 1944, lies on a terrace above the Prut River. It has large textile and machine industries and produces chemicals, lumber, and food products.

Storozhinets (Rumanian *Storozhineti*) is a road center in the agricultural region southwest of Chernovtsy.

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438* Khotin (Rumanian *Hotin*) lies in an orchard and vineyard area on
U the Dniester River. There is a noted leather industry.
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Stanislav Oblast

Area, 5,400, population, 1,300,000

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133* Stanislav Oblast is drained by the upper Dniester and its right affluents
U descending from the Carpathian Mountains. It has important petro-
133 leum, salt, natural-gas, and potash deposits in the areas of Dolina and
Bolekhov, with petroleum fields extending along the foothills in a south-
easterly direction to Kosmach, southwest of Kolomyia. The principal
oil towns are Bolekhov, Dolina, Perehynsk, Bogorodchany (where
54 ozocerite is also secured), Solotvin, Nadvornaya, Pechenezhin, and Kos-
313 mach. Petroleum is refined at Bolekhov, Stanislav, and Kolomyia. The
U main lumber centers are Delyatin and Kut, which has a large wood-
313 distillation industry. On the right bank of the Dniester River lies the
54 agricultural zone of the oblast, where grains, tobacco, and sugar beets
241 are raised. Tobacco is processed at Zabolotov and sugar at Gorodenka.
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438* Stanislav (Polish *Stanisławów*, German *Stanislaw*) has railroad and
U machine shops, an oil refinery, and textile and leather industries and
438 produces asphalt, ceramics, lumber, and food products.

Kolomyia (Polish *Kolomyja*, German *Kolomea*), on the upper Prut River, has machine works and oil-refining and chemical plants. Textiles and cement are also produced.

Drogobych Oblast

Area, 4,000, population, 1,200,000

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135 Drogobych Oblast lies on the northern slopes of the Carpathian Moun-
U tains and is bordered by Poland in the west. It is the chief petroleum
135 region of the Western Ukraine, with the chief oil fields in the area of
Drogobych and Borislav. Near by are potassium and magnesium salt
mines and natural-gas wells. Salt is mined at Dobromil'. Agriculture is
54 important along the Dniester River.

438* Drogobych (Polish *Drohobycz*) is the center of the Western Ukrain-
315 ian petroleum region, with important refining and chemical installations
U and potash and magnesium salt mines. It trades in petroleum, livestock,
[438] and agricultural products and produces rubber goods, lumber, and food
315 products.

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315 Borislav (Polish *Borysław*) is another petroleum center southwest of
Drogobych. It has petroleum and natural-gas wells and engages in the

WESTERN UKRAINE

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manufacture of drilling equipment and the processing of ozocerite.³¹⁵
The health resort of Truskavets, with mineral springs, lies just to the east.⁵²⁹

Sambor is an agricultural center, with sawmilling, flour-milling, and distilling industries. 5U
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Stryi (Polish Stryj) is a rail center where there are machine and metalworking industries, producing mainly drilling equipment, and chemical and lumber (matches and furniture) plants. Petroleum and natural gas are secured near by. From the gas wells of Dashava, just northeast of the city, a pipe line has been laid to Kiev during the post-war Five-Year Plan for industrial and domestic consumption. 438

The Poles'ye, which is wooded in the north, close to the Pripet River, also contains extensive marshy areas. It is the most backward section of the Western Ukraine. Its subsistence crops are rye and potatoes. Industry is poorly developed and is restricted to flour milling, sawmilling, and brickworking in the rural areas. 5U
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Rovno Oblast

Area, 8,000, population, 1,200,000

Rovno Oblast is drained by the Goryn and its affluent, the Sluch'. In the south, on the higher ground of the Volyn'-Podolian upland, agriculture produces grains, hops, tobacco, and sugar beets; in the northern section lumbering is the main industry. Granite, cement rock, and slate are quarried. 5U
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Rovno (Polish Równe) is a rail center having railroad shops, agricultural machinery works, and chemical and lumber industries.

Volyn' Oblast

Area, 7,700, population, 1,100,000

Volyn' Oblast which borders on Poland along the Western Bug River in the west, has some agriculture (grains and tobacco) in the south, but mainly lumbering industries in the north, along the Pripet River and its affluents. 5U
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Lutsk (Polish Łuck), the capital, lies on a minor rail branch, at the southern edge of the Pripet Marshes. It is an agricultural center and produces agricultural implements, clothing, leather, lumber, and flour. 5U
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Vladimir-Volynskiy (Polish Włodzimierz) is a rail junction and grain-trading point near the Polish border.

[of Beriskiv in Drohobych Oblast - 21/1/51]

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438* Kovel' (Polish *Kowel*) is a rail center with knitting and hosiery mills, sawmills, tobacco, and flour mills.

504
133* The central section of the Western Ukraine lies in the fertile Volyn'-Podolian upland and includes the oblasts of Ternopol' and L'vov, as well as the adjoining zones of the oblasts to the north and the south. It is drained by the Dniester River and its left affluents, which cut deep rayines into the plateau. Its black-earth soils and the moderate climate favor an agricultural economy. The section is very similar to the right-bank wooded steppe of the old Soviet Ukraine in its dense rail network, its concentrated population, and the large number of urban centers. Grains (wheat, rye, and barley), potatoes, and sugar beets are the basic crops for the large food-processing industry, with flour mills and distilleries.

Ternopol' Oblast

504
Area, 5,300, population, 1,500,000

133* Ternopol' Oblast lies in the watershed area between the Pripet and the Dniester rivers. Grains (mainly winter wheat) and sunflowers are the principal crops throughout the larger portion of the oblast. Sugar beets are cultivated in the extreme north, and fruits in the south along the Dniester River. Building stone is quarried in several places.

504
438* Ternopol' (until 1944, Tarnopol') is a rail center with an active grain and egg trade. It produces agricultural implements, cement, lumber, and food products.

Kremenets (Polish *Krzemieniec*), on a rail spur north of Ternopol', produces flour-milling equipment, ceramics, and cement. There are peat bogs and chalk quarries.

Chortkov (Polish *Czortków*) is a rail center south of Ternopol', producing rubber goods, cement, and tile.

L'vov Oblast

504
Area, 4,300, population, 1,500,000

504
133* L'vov Oblast lies on the Polish border on the upper Western Bug. East of L'vov grains, potatoes, and fruits are the chief crops. Extensive quarrying industries form the basis for the manufacture of cement, glass, bricks, and tiles.

504
438* L'vov (Polish *Lwów*), the largest city of the Western Ukraine, is a nine-way rail hub and major industrial center trading in agricultural